



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JUN 2 2010

Thomas J. Regan, Jr.  
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White Springs Agricultural Chemicals, Inc.  
c/o Karin S. Torain, Esq.  
Senior Counsel  
PCS Administration (USA), Inc.  
1101 Skokie Boulevard  
Suite 400  
Northbrook, IL 60062

SUBJECT: Administrative Order on Consent Pursuant to Section 7003(a) of RCRA  
Docket No. RCRA-04-2010-4250  
EPA I.D. Nos.: FLD 098 372 360 (Suwannee River Complex)  
FLD 000 622 548 (Swift Creek Complex)

Dear Mr. Regan:

Enclosed is the Administrative Order on Consent (Order) entered into by White Springs Agricultural Chemicals, Inc., d/b/a PCS Phosphate – White Springs (PCS), located in White Springs, Florida, and the United States Environmental Protection Agency (EPA), Region 4. This Order became effective on the date of signature by the RCRA Division Director. EPA received no request for a public hearing in this matter. EPA has enclosed comments received during the public comment period for the Order, which occurred from May 3, 2010 to May 20, 2010, as well as EPA's responses to those comments. A copy of the Order and the public comments and EPA's responses will be sent to each commenter.

We appreciate PCS's efforts to negotiate this Order with EPA. If you have any questions, please call Joan Redleaf Durbin, Senior Attorney, at (404) 562-9544.

Sincerely,

G. Alan Farmer, Director  
RCRA Division

Enclosures (2):

1. Executed RCRA Section 7003 Order
2. Public comments and EPA responses

cc: Mary Beth Deemer, Jones Day  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP

Internet Address (URL) • <http://www.epa.gov>

**Enclosure 1**

**PCS 7003 Administrative Order on Consent**

UNITED STATES  
ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

<b>IN THE MATTER OF:</b>  White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate - White Springs Suwannee River Complex State Road 137 White Springs, Florida 32096  EPA ID No. FLD 098 372 360  White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate - White Springs Swift Creek Complex US Highway 41 N White Springs, Florida 32096  EPA ID No. FLD 000 622 548	<b>DOCKET NO. RCRA-04-2010-4250</b>  <b>PROCEEDING UNDER SECTION 7003(a) OF THE RESOURCE CONSERVATION AND RECOVERY ACT, 42 U.S.C. § 6973(a)</b>
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**ADMINISTRATIVE ORDER ON CONSENT**

**I. INTRODUCTION**

1. This is an administrative action instituted pursuant to Section 7003(a) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6973(a). This Administrative Order on Consent (Order) is entered into by the United States Environmental Protection Agency (EPA), and White Springs Agricultural Chemicals, Inc. d/b/a PCS Phosphate - White Springs (PCS or Respondent), a Delaware corporation doing business in the State of Florida. This Order provides for the management of PCS's three phosphogypsum stack systems (PGSSs) to mitigate the long-term risk to human health and the environment in the event of the formation and/or collapse of additional sinkholes as described in Section VII (Order), including any Additional Work that may be required by Section XII of this Order, by Respondent in connection with the facilities located at State Road 137, White Springs, Florida 32096 (Suwannee River Complex), and US Highway 41 N. White Springs, Florida 32096 (Swift Creek Complex). Together, these facilities will be referred to as the "Facilities." Respondent shall finance and perform the work in accordance with the plans, standards, specifications and schedules set forth in this Order or developed by Respondent and approved by EPA pursuant to this Order.

2. EPA has determined that Respondent has contributed or is contributing to the past or present handling, storage, treatment, transportation or disposal of "solid waste and hazardous waste," or constituents of such waste that may present an imminent and substantial endangerment to health or the environment. Specifically, on December 10, 2009, a sinkhole

formed in the Swift Creek Phosphogypsum Stack ("Gypstack") inside Cell #3. According to Respondent's initial calculation, 84 million gallons of process wastewater (pH less than 2 standard units (su)) and solid phosphogypsum were discharged into the Floridan aquifer. Based on data provided by Respondent, EPA has accepted Respondent's assertion that approximately 68 million gallons of process wastewater were discharged through this sinkhole at the time of the collapse.<sup>1</sup> In the course of investigating this sinkhole, EPA identified an additional 22 closed circular depressions within the three separate unlined PGSSs that EPA has determined may be indicative of sinkhole features. As a result, EPA has significant concerns regarding future contamination of the Floridan aquifer. As noted below, in Paragraph 47, the Floridan aquifer is the primary source of drinking water in the local area, the State of Florida and South Georgia. In addition, given the occurrence of the recent sinkhole formations, EPA contends the risk to human health or the environment is further exacerbated by the continued increase in elevation of all three PGSSs to permitted levels, thereby increasing the volume of phosphogypsum and associated porewater that could be released in the event of a future sinkhole formation and/or collapse ('formation/collapse').

3. Respondent's participation in this Order shall not constitute or be construed as an admission of liability. Respondent neither admits nor denies the factual allegations (Section V) and legal conclusions (Section VI) set forth in the Order. The issuance of this Order does not bind EPA to the factual allegations (Section V) set forth in this Order.

4. EPA and Respondent acknowledge that this Order has been negotiated by the parties in good faith and that this Order is fair, reasonable, and in the public interest. Respondent participated in negotiation and agrees to perform, in good faith, those duties set forth in Section VII (Order).

5. Pursuant to Section 7003(a) of RCRA, 42 U.S.C. § 6973(a), EPA has notified the State of Florida of this action.

6. This Order is based upon the Administrative Record compiled by EPA and incorporated herein by reference. The record is available for review at EPA's regional office at 61 Forsyth Street, SW, Atlanta, Georgia 30303. To review the Administrative Record, contact Bethany Russell, South Section, RCRA and OPA Enforcement and Compliance Branch, EPA Region 4, at (404) 562-8542.

## **II. JURISDICTION**

7. This Order is issued to protect public health and/or the environment pursuant to Section 7003 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act ("RCRA"), and further amended by the Hazardous and Solid Waste Amendments of 1984 ("HSWA"), 42 U.S.C. § 6973. Section 7003(a) of RCRA authorizes the Administrator of the EPA to issue an Order whenever the Administrator receives evidence that the past or

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<sup>1</sup> Based on PCS's data, it is likely another 13.9 million gallons were released through seepage between the time the sinkhole formed and the cell collapsed. In addition, there will be approximately another 12 million gallons released through seepage from the time the cell collapsed, until the sinkhole is grouted.

present handling, storage, treatment, transportation, or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to human health or the environment. The authority to issue this Order has been delegated by the Administrator of EPA to the Regional Administrator, EPA Region 4, by EPA Delegation Nos. 8-22-A and 8-22-C, dated May 11, 1994, and No. 8-23, dated March 6, 1986, and further delegated to the Director, RCRA Division by EPA Regional Delegation No. 8-22-C, dated November 19, 1993, and Nos. 8-22-A and 8-23, TN 67.

8. This Order is issued to PCS, present generator and present operator and owner of the Facilities located in Hamilton County, FL. Respondent agrees to undertake and complete all actions required of it by the terms and conditions of this Order. In any action by EPA and the United States to enforce the terms of this Order, Respondent consents to and agrees not to contest the authority or jurisdiction of the RCRA Division Director to issue or enforce this Order, and agrees not to contest the validity of the Order or its terms and conditions.

### **III. PARTIES BOUND**

9. The provisions of this Order shall apply to and be binding upon Respondent and its officers, employees, agents, successors, and assigns, and shall apply whether or not Respondent's activities in connection with the Facilities have occurred while doing business by any other name, including, but not limited to, White Springs Agricultural Chemicals or PCS Phosphate. Notice of this Order shall be given to any successors in interest prior to transfer of the Facilities or their operations. Action or inaction of any persons, firms, contractors, employees, agents, or corporations acting under, through, or for Respondent shall not excuse any failure of Respondent to fully perform the obligations under this Order.

10. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories, and consultants retained to conduct or monitor any portion of the work performed pursuant to this Order within seven (7) calendar days of the effective date of this Order, or on the date of such retention, and Respondent shall condition all such contracts on compliance with the terms of this Order.

11. Respondent shall give notice to EPA at least thirty (30) calendar days prior to transfer of ownership or operation of the Facilities.

### **IV. STATEMENT OF PURPOSE**

12. The two-fold purpose of this Order is to: (1) require Respondent to develop and implement a plan acceptable to EPA to mitigate the risks posed by the past or present handling, storage, treatment, transportation, or disposal of any solid and/or hazardous waste that may present an imminent and substantial endangerment to human health and/or the environment; and (2) to ensure that the actions contained in the plan and deemed necessary by EPA are designed and implemented to protect human health and/or the environment now and in the future.

13. As described in detail in Section VII (Order), this Order requires Respondent to develop and implement a plan which is acceptable to EPA and which is designed to significantly limit exposure of the formations comprising the Floridan aquifer underlying the PGSSs to contamination by process wastewater. The goals of the plan required by the Order are to mitigate the long-term risk posed by sinkhole formation/collapse by reducing seepage through the PGSSs, reduce the volume of water available for loss to the Floridan aquifer in the event of another sinkhole formation/collapse, and minimize process wastewater loss in event of sinkhole formation/collapse within the cooling pond system.

## **V. FINDINGS OF FACT**

14. Respondent employs approximately 708 personnel at its mining and chemical plant operations in White Springs, Florida. PCS's generator status notifications to the Florida Department of Environmental Protection (FDEP) identify the Swift Creek and Suwannee River Facilities as small quantity generators of hazardous waste in the State of Florida.

15. Both Facilities and Respondent's mining operations are encompassed by a zone of discharge that extends vertically to the bottom of the Hawthorn confining unit that overlays the Floridan aquifer and horizontally over approximately 32,500 acres of Respondent's property.

16. A zone of discharge is a predefined three-dimensional area underlying or surrounding a site and extending to the base of a specifically designated aquifer or aquifers, within which there is an opportunity for the treatment, mixture or dispersion of discharged wastes.

17. The zone of discharge is permitted by industrial wastewater permit no. FL 0000655.

18. A lined PGSS is a system that is underlain by a continuous layer of low permeability synthetic materials and either clay or compacted phosphogypsum that control the vertical and lateral release of waste constituents or leachate from the system. An unlined PGSS is a system that has no underlay of low permeability synthetic materials to control the vertical and lateral release of waste constituents or leachate from the system.

### **PCS Swift Creek Complex**

19. Respondent's Swift Creek Complex's operations include the production of sulfuric acid, phosphoric acid, and black liquid superphosphoric acid (SPA). Additional operations include a PGSS, electrical cogeneration, raw material storage and handling, and product handling and shipping facilities.

20. To produce sulfuric acid, PCS burns molten sulfur to produce sulfur dioxide. The process to produce sulfuric acid is a double absorption process which uses a catalyst and absorption towers. The resultant sulfuric acid is stored as 98% acid.

21. Phosphoric acid is produced using the hemi-hydrate process by digesting phosphate rock with sulfuric acid. The reaction yields dilute phosphoric acid and a hemi-hydrate calcium sulfate that converts to gypsum in a hydration tank. The reaction mixture is filtered to separate gypsum

crystals and other solids from the dilute phosphoric acid. The filtrate, dilute phosphoric acid, is concentrated by evaporation. The filtered solids are referred to as phosphogypsum. The phosphogypsum crystals separated from the reaction mixture are slurried with process wastewater and pumped to the Swift Creek Phosphogypsum Stack ("Swift Creek Gypstack").

22. Process wastewaters generated from the Swift Creek Complex's production of phosphoric acid and SPA contain residual phosphoric acid and are therefore corrosive with a pH of less than 2 and are ultimately discharged to unlined earthen ditches and ponds that are components of the Swift Creek Complex's cooling pond system where the process wastewaters commingle with stormwater and decant (drainage) water from the Swift Creek Gypstack.

23. Together, the Swift Creek Gypstack and its associated cooling pond system make up the Swift Creek Complex's PGSS. The Swift Creek PGSS occupies a total area of approximately 670 acres. The current elevation of the Swift Creek Gypstack is 290 feet, and it is permitted to reach an elevation of 450 feet. The Swift Creek Gypstack accounts for 450 of the 670 acres and is unlined. The associated cooling pond system is unlined and consists of above-grade and below-grade cooling ponds and a return water ditch. To reduce seepage impact from the unlined cooling pond system, Respondent relies on variable natural clay deposits and water level control features. The natural ground surface elevation adjacent to the Swift Creek PGSS varies between 139 feet and 144 feet.

24. The below-grade portion of the cooling pond system includes 75 acres of primary and secondary water treatment ponds or retention ponds that are located immediately north of the phosphogypsum stack and west of the above-grade cooling pond.

25. An above-grade cooling pond of about 120 acres lies northwest of the Swift Creek Complex's chemical plant and gypstack. Construction of the 120-acre above-grade cooling pond began in December 1978 and was completed in October 1979. The minimum crest elevation of the dikes comprising this pond is 158 feet and the maximum design fluid level is 153 feet.

26. The Swift Creek Stack is partially surrounded by a perimeter hydraulic ditch on the north, east, south and southwest sides that provides pressure relief and collection of process wastewater seepage.

27. Data provided by Respondent identifies seven process wastewater storage areas within the Swift Creek PGSS. There are six storage compartments on top of the gypstack: Cells # 1, #2, #3, #4, North Stack Cell, and South Stack Cell. The above-grade cooling pond and the A Canal store process wastewater at the base of the Swift Creek Stack. See Figure 1.

### **PCS Suwannee River Complex**

28. Respondent's Suwannee River Complex's chemical manufacturing operations currently include the production of sulfuric acid, phosphoric acid, monoammonium phosphate (MAP), and green superphosphoric acid (SPA/LoMag). Additional operations include, but are not limited to, two PGSSs, electric cogeneration, raw material storage and handling, wastewater storage and handling, and product handling and shipping.

29. The Suwannee River Complex produces phosphoric acid also using the hemihydrate process. Phosphoric acid is manufactured using the same basic process as that used at the Swift Creek Complex. The gypsum crystals separated from the reaction mixture are slurried with process wastewater and pumped to one of two gypstacks: the Dorr-Oliver Gypstack or the CTC Gypstack.

30. Process wastewaters generated from the Suwannee River Complex's production of phosphoric acid and other products listed in Paragraph 28 contain residual phosphoric acid and are therefore corrosive with a pH of less than 2. These process wastewaters are ultimately discharged to unlined earthen ditches and ponds that are components of the CTC and Dorr-Oliver Gypstacks' cooling pond systems.

31. The CTC Gypstack is located in the northwest corner of the Suwannee River Complex, immediately west and northwest of the chemical plant. The CTC Gypstack is surrounded by a perimeter process wastewater cooling pond system (CTC cooling pond) that includes above- and below-grade components. The CTC cooling pond is on the north, west, and south sides of the CTC Gypstack and has an operational water level that is above the adjacent natural ground surface elevation; the portion of the pond located east of the CTC Gypstack and immediately west of the chemical plant is a below-grade pond. A spillway near the southwest corner of the CTC cooling pond controls the water level in the above-grade pond. According to Respondent, the operating water level in the below-grade pond is maintained below the surrounding natural ground surface.

32. The CTC PGSS is unlined and was placed in operation in 1975 and currently encompasses a total base area of approximately 475 acres, of which 375 acres is occupied by the CTC Gypstack. The highest top elevations of the existing PGSS are between 244 and 268 feet and it is permitted to reach an elevation of 430 feet. The natural ground surface elevation adjacent to the CTC PGSS varies between 125 feet and 130 feet.

33. Data provided by Respondent identifies six process wastewater storage areas atop the CTC Gypstack. The six storage compartments on top of the gypstack are identified as Cells # 2, #2 North, #2 South, #3, #4, #5, and #6. The above-grade and below-grade cooling ponds store process wastewater circling the base of the CTC Gypstack. See Figure 2. To reduce seepage impact from the CTC PGSS, Respondent relies on variable natural clay deposits and water level control features.

34. The Dorr-Oliver PGSS is unlined and was the original phosphogypsum storage area for the Suwannee River Complex and currently encompasses a total area of approximately 370 acres, including approximately 95 acres for the above-grade cooling pond, 200 acres for the gypstack and return water ditches, and approximately 60 acres for the surge pond located immediately southwest of the gypstack. The current elevation of the Dorr-Oliver PGSS is 210 feet, and it is permitted to reach an elevation of 290 feet. To reduce seepage impact from the Dorr-Oliver PGSS, Respondent relies on variable natural clay deposits and water level control



features. The natural ground surface elevation adjacent to the Dorr Oliver PGSS varies from 120 feet to 125 feet.

35. The Dorr-Oliver cooling pond is located southwest of the Dorr-Oliver Gypstack. The perimeter dike has a dike crest elevation of 136 feet and, according to Respondent, is operated with a design freeboard of not less than 4 feet. Process wastewater is pumped into the cooling pond and discharged through a weir board spillway into the Dorr-Oliver surge pond. In 1989, the perimeter dike of the surge pond was raised to a crest elevation of 145 feet.

36. A spillway structure located near the northwest corner of the surge pond discharges process wastewater into a perimeter return water ditch that parallels the west wall of the Dorr-Oliver Gypstack.

37. Two lime sludge dredge ponds are located on top of hydraulically-placed tailings deposits from mining operations used to reinforce the south wall dike of the Dorr-Oliver surge pond. These elevated ponds were previously used to settle lime sludge sediments dredged from two below-grade lime treatment ponds located on the west side of the Dorr-Oliver surge pond. Those settling ponds are no longer active.

38. Data provided by Respondent identifies four process wastewater storage areas atop the Dorr-Oliver Gypstack. The four storage compartments on top of the gypstack are identified as Cell # 1 East, #1 West, #1 Center and #3. The above-grade and below-grade cooling ponds store process wastewater circling the base of the Dorr-Oliver Gypstack. See Figure 3. Phosphogypsum that meets EPA's standards for agricultural use is sold from the Dorr-Oliver gypstack.

### **Brief Regulatory History of Phosphogypsum Stack Systems in Florida**

39. In January 1993, Florida's Environmental Regulation Commission adopted Rules governing the construction, operation, closure, and post-closure of Phosphogypsum Stack Systems, which rules are now promulgated under Chapter 62-673, Florida Administrative Code (F.A.C.), Phosphogypsum Management.

40. Among other requirements, the Rules prohibited disposal of phosphogypsum and process wastewater in unlined stack systems after March 25, 2001. Under the Rules, an exemption from the mandatory closure provision could be granted if the owner of the PGSS could demonstrate that the PGSS was either not causing violations of water quality standards beyond its permitted zone of discharge prior to March 25, 1993 and was not expected to cause violations after that date, or the owner implemented corrective measures to remediate any existing contamination where such measures would result in compliance with all water quality standards by March 25, 2001.

### **PCS's Demonstration**

41. In 1996, on behalf of PCS, Ardaman & Associates submitted a demonstration to the FDEP, seeking an exemption from the lining requirements for unlined phosphogypsum stack systems. On October 16, 1996, FDEP followed up with a Supplemental Information Request

requesting clarification and additional documentation from Respondent to support Respondent's demonstration.

42. Ardaman & Associates prepared the response to FDEP's request on behalf of PCS. In a letter dated May 21, 1998, from Ardaman & Associates to PCS, Ardaman stated that "[t]his submittal has been prepared to support PCS Phosphate's phosphogypsum stack systems exemption request [from lining requirements]. The request for exemption is made under 'Scenario A' of the Rule...[t]hat the phosphogypsum stack system is not causing and is not reasonably expected to cause a violation of water quality beyond its permitted Zone of Discharge." Ardaman partially based this exemption request on a conclusion that "[t]he potential for sinkhole development at the two complexes is extremely low."

### **Environmental Background**

43. On September 10, 2008, EPA and Respondent entered into a consent agreement issued pursuant to Section 3013 of RCRA (Section 3013 Order). This Section 3013 Order requires Respondent to monitor and/or sample groundwater, soil, sediment and surface waters to determine any environmental impacts from its operations.

44. According to a Sampling and Analysis Report by Ardaman & Associates submitted to EPA and FDEP on behalf of Respondent pursuant to its Section 3013 Order, the major watersheds in Hamilton County are the Swift, Roaring, Hunter, and Rocky Creeks. These watersheds drain to the Suwannee River. The Swift Creek Complex is located in the headwaters of the Swift Creek watershed, while the Suwannee River Complex is located in the headwaters of the Hunter and Swift Creek watersheds.

45. The groundwater underlying the Facilities consists of the surficial aquifer and the Floridan aquifer.

46. The surficial aquifer is not used as a drinking water source within the 32,500 acre ZOD, but is used for some private well drinking sources within a 2 mile radius off-site.

47. The Floridan aquifer is the primary source of drinking water in the local area, the State of Florida and South Georgia. The Floridan aquifer supplies freshwater to wells at depths of up to 1,000 feet below ground surface.

### **Sinkhole Formation**

48. While most of Florida is prone to sinkhole formation due to its underlying thick, solution-weathered carbonate deposits, the formation and/or collapse of sinkholes may be accelerated by the existence of a phosphogypsum stack system, thereby increasing susceptibility of the aquifer to contamination from process wastewater/surface water infiltration.

49. At least two factors that increase or accelerate the risk of sinkhole formation/collapse within the PGSSs include: (1) the lack of an engineered physical barrier coupled with the lack of

a fully intact confining layer at the PGSSs, and (2) the increased hydraulic head in the surficial aquifer beneath an unlined stack that increases the hydraulic gradient between the surficial aquifer and the underlying Floridan aquifer.

50. In May 2007, a sinkhole formed on the northwest side of the CTC Gypstack, releasing at least 2 million gallons of process wastewater entrained with phosphogypsum into the Floridan aquifer. Respondent contends that no impacts were noted within the Floridan aquifer, however, EPA asserts that the monitoring well network at that time was insufficient to characterize, adequately quantify, or fully detect existing impacts to the Floridan aquifer.

51. Prior to an April 2009, meeting with Respondent, EPA requested that Respondent identify contingency plans for process wastewater releases from possible cell collapses for all three PGSSs. EPA stated that these collapses could occur as a result of sinkhole activity.

52. During the meeting among EPA, FDEP, and Respondent on April 21-22, 2009, EPA, in conjunction with FDEP, informed Respondent that the 1998 demonstration to FDEP did not present an accurate risk of sinkhole formation/collapse, and that the sinkhole formation/collapse risk at both Facilities was much higher than that calculated by Respondent. As a result of these determinations, EPA requested that Respondent strongly consider synthetic lining of its Swift Creek Gypstack, and synthetic lining or permanent closure of all or portions of its Dorr-Oliver and/or CTC Gypstacks.

53. During the April 21-22, 2009, meeting, in response to EPA's request for contingency plans for process wastewater releases, Respondent provided data indicating that process wastewater releases from all three PGSSs might not be contained by the available nearby storage volume of the potential receiving bodies. Of the 27 potential wastewater release scenarios evaluated, at least ten scenarios involved the release of significant volumes of process wastewater from the PGSS to the surrounding plant area, public highway or railroad. In addition, Respondent did not provide data regarding the potential for a cascading failure scenario, where collapse of a particular wastewater holding area could be linked to the collapse of other receiving cells.

54. On December 10, 2009, a sinkhole collapsed in the Swift Creek Gypstack inside Cell #3, releasing approximately 68 million gallons of process wastewater and phosphogypsum into the Floridan aquifer.

55. Based on the formation of a second sinkhole within a three year timeframe, EPA reviewed aerial photographs from 1937, 1947 (Suwannee River only), 1954 and 1966, and 1972 prior to the construction of the PGSSs and noted closed circular depressions that may be indicative of sinkhole features beneath each of the PGSSs. Thirteen such features are identified beneath the Swift Creek PGSS, seven under the CTC PGSS and three beneath the Dorr-Oliver PGSS. Respondent disagrees that the presence of closed circular depressions are always indicative of sinkhole features.

56. Respondent has since recharacterized and increased the sinkhole potential beneath the PGSSs at its Facilities.

57. Given the incidence of a second sinkhole within three years, as well as the existence of the closed circular depressions that may be indicative of sinkhole features, EPA has concluded that there is a significant risk of future potential sinkhole formation/collapse beneath the PGSSs at the Facilities.

58. Following the December 10, 2009, sinkhole collapse, Respondent immediately activated production wells and increased the draw-down on the Floridan aquifer by pumping in excess of 5,000 gallons of water per minute from the aquifer. Over time, the increased pumping rates will enable Respondent to recapture a significant portion of the release, including seepage occurring before and after the sinkhole collapse, out of the aquifer, for consumption in its production or mining operations; or treatment as necessary, or discharge of the recovered process wastewater through PCS's permitted National Pollutant Discharge Elimination System (NPDES) outfalls.

59. Based on a review of the groundwater modeling conducted by Respondent and the results of Respondent's groundwater sampling and monitoring efforts, EPA cannot conclude that the entire volume of process wastewater and phosphogypsum released through the sinkhole can be captured. EPA contends that the contamination may have migrated horizontally and vertically through underground pathways, and it is unlikely that all contaminants can be captured by the PCS production wells.

60. As stated in Paragraph 15 above, Respondent's vertical zone of discharge extends to the bottom of the Hawthorn confining unit situated above the Floridan aquifer.

61. Release of constituents above the Maximum Contaminant Levels (MCLs) to the Floridan aquifer is a violation of Chapter 62-520, F.A.C.

62. In addition to the low pH of the process wastewater, the following constituents, among others, are reasonably likely to be found within process wastewater or phosphogypsum: phosphate, fluoride, cadmium, chromium, arsenic, zinc, mercury, lead, cobalt, molybdenum, nickel, selenium, radium-226, uranium-238, vanadium, antimony, thallium, sodium, sulfate, chloride, copper, beryllium, gross alpha and beta radiation.

63. Since the sinkhole formation, monitoring wells have been sampled primarily for parameters such as sodium, sulfate, and fluoride that are well-known indicator species for identification of phosphogypsum and process wastewater contamination. Between December 10, 2009, and February 11, 2010, sampling of PCS's South Deep Well (SDW) (see figure 4) has indicated concentrations of parameters identified in Table 1 that are greater than the secondary drinking water standards for those parameters. Although the Facilities are not subject to the secondary drinking water standards, the comparison is instructive to demonstrate levels of contamination. In summary, in at least 35 instances, the samples have been higher than the secondary drinking water standard for sulfate, in 39 instances pH levels have been lower in the samples, and in 39 instances, fluoride levels have been higher in the samples. It is possible that

PCS may have exceeded primary drinking water standards for some of the constituents identified in Paragraph 62, including arsenic, cadmium, chromium and fluoride, but this cannot be determined due to the location and depths of the monitoring wells. The health effects of select constituents for which primary drinking water standards may have been exceeded are described in Paragraph 64.

**Table 1. SDW Samples Comparison to Secondary Drinking Water Standard.**

C-SDW Well				
Parameter	pH	Sulfate	Fluoride	
MCL	6.5-8.5	250 mg/L	2 mg/L	
Date / Time	Map Code:	C-SDW	C-SDW	C-SDW
12/15/09		264.7		
12/17/09		254.2	2.10	
12/18/09			2.50	
12/19/09	6.47		2.70	
12/20/09	6.38		2.82	
12/21/09	6.41		2.83	
12/22/09	6.37	276.8	2.77	
12/23/09	6.38		2.74	
12/24/09	6.39	288.0	3.03	
12/25/09	6.32		2.80	
12/26/09	6.31		3.01	
12/27/09	6.43		2.70	
12/28/09	6.40	277.6	2.34	
12/29/09	6.29	321.2		
12/30/09	6.24	300.0	2.50	
12/31/09	6.37	312.4	2.67	
1/1/10	6.17	309.2	2.83	
1/2/10	6.37	286.8	2.79	
1/3/10	6.20	301.0		
1/4/10			2.56	
1/5/10	6.29	268.0	2.47	
1/6/10	6.45		2.49	
1/7/10			2.50	
1/8/10	6.33	256.3	2.42	
1/9/10	6.35	299.6	2.43	
1/10/10			2.62	
1/11/10	6.33	293.0	2.24	
1/12/10	6.25	281.0	2.37	
1/13/10		263.0		
1/14/10			2.44	
1/15/10	6.35	270.0	2.29	
1/16/10	6.41	289.6	2.30	
1/17/10		299.0	2.26	
1/18/10			2.40	
1/19/10	6.42	310.0	2.34	
1/20/10	6.45	272.0	2.41	
1/21/10	6.34	269.0	2.31	
C-SDW Well				
Parameter	pH	Sulfate	Fluoride	
MCL	6.5-8.5	250 mg/L	2 mg/L	
1/24/10	6.43	289.0	2.15	
1/25/10	6.44	288.8	2.29	
1/26/10	6.44	268.0	2.09	
1/27/10	6.47	319.0	2.09	
1/28/10	6.31			
1/29/10		281.0		
1/30/10	6.48			
2/1/10	6.36	281.0	2.08	
2/2/10	6.48			
2/3/10	6.37	299.0		
2/4/10	6.47			
2/7/10	6.4	265.0		
2/9/10		299.0		
2/11/10		301.0		

On January 6, 2010, Respondent sampled the SDW. Analytical data from this sampling did not reveal levels above the primary drinking water standards for arsenic, barium, cadmium, chromium, copper, lead, selenium, silver, or mercury.

64. The following descriptions and health effects were obtained from the Agency for Toxic Substances and Disease Registry (ATSDR):

1. Arsenic is a naturally occurring element. Acute (short-term) high-level inhalation exposure to arsenic dust or fumes has resulted in gastrointestinal effects (nausea, diarrhea, abdominal pain); central and peripheral nervous system disorders have occurred in workers acutely exposed to inorganic arsenic. Chronic (long-term) inhalation exposure to inorganic arsenic in humans is associated with irritation of the skin and mucous membranes. Chronic oral exposure has resulted in gastrointestinal effects, anemia, peripheral neuropathy, skin lesions, hyperpigmentation, and liver or kidney damage in humans. Inorganic arsenic exposure in humans, by the inhalation route, has been shown to be strongly associated with lung cancer, while ingestion of inorganic arsenic in humans has been linked to a form of skin cancer and also to bladder, liver, and lung cancer. EPA has classified inorganic arsenic as a Group A, human carcinogen.

2. Cadmium is a soft silver-white metal that is usually found in combination with other elements. The acute (short-term) effects of cadmium in humans through inhalation exposure consist mainly of effects on the lung, such as pulmonary irritation. Chronic (long-term) inhalation or oral exposure to cadmium leads to a build-up of cadmium in the kidneys that can cause kidney disease. Cadmium has been shown to be a developmental toxicant in animals, resulting in fetal malformations and other effects, but no conclusive evidence exists in humans. An association between cadmium exposure and an increased risk of lung cancer has been reported from human studies, but these studies are inconclusive due to confounding factors. Animal studies have demonstrated an increase in lung cancer from long-term inhalation exposure to cadmium. EPA has classified cadmium as a Group B1, probable human carcinogen.

3. Chromium occurs in the environment primarily in two valence states, trivalent chromium (Cr III) and hexavalent chromium (Cr VI). Exposure may occur from natural or industrial sources of chromium. Chromium (III) is much less toxic than chromium (VI). The respiratory tract is also the major target organ for chromium (III) toxicity, similar to chromium (VI). Chromium (III) is an essential element in humans. The body can detoxify some amount of chromium (VI) to chromium (III). The respiratory tract is the major target organ for chromium (VI) toxicity, for acute (short-term) and chronic (long-term) inhalation exposures. Shortness of breath, coughing, and wheezing were reported from a case of acute exposure to chromium (VI), while perforations and ulcerations of the septum, bronchitis, decreased pulmonary function, pneumonia, and other respiratory effects have been noted from chronic exposure. Human studies have clearly established that inhaled chromium (VI) is a human carcinogen, resulting in an increased risk of lung cancer. Animal studies have shown chromium (VI) to cause lung tumors via inhalation exposure.

4. Selenium is a naturally occurring substance that is toxic at high concentrations but is also a nutritionally essential element. Hydrogen selenide is the most acutely toxic selenium compound. Acute (short-term) exposure to elemental selenium, hydrogen selenide, and selenium dioxide by inhalation results primarily in respiratory effects, such as irritation of the mucous membranes, pulmonary edema, severe bronchitis, and bronchial pneumonia. Epidemiological studies of humans chronically (long-term) exposed to high levels of selenium in food and water have reported discoloration of the skin, pathological deformation and loss of nails, loss of hair, excessive tooth decay and discoloration, lack of mental alertness, and listlessness. Epidemiological studies have reported an inverse association between selenium levels in the blood and cancer occurrence and animal studies have reported that selenium supplementation, as sodium selenate, sodium selenite, and organic forms of selenium, results in a reduced incidence of several tumor types. The only selenium compound that has been shown to be carcinogenic in animals is selenium sulfide, which resulted in an increase in liver tumors from oral exposure. EPA has classified elemental selenium as a Group D, not classifiable as to human carcinogenicity, and selenium sulfide as a Group B2, probable human carcinogen.

5. Sulfate is a substance that occurs naturally in drinking water. Health concerns regarding sulfate in drinking water have been raised because of reports that diarrhea may be associated with the ingestion of water containing high levels of sulfate. Of particular concern are groups within the general population that may be at greater risk from the laxative effects of sulfate when they experience an abrupt change from drinking water with low sulfate concentrations to drinking water with high sulfate concentrations. Neither EPA nor FDEP provide a primary MCL for sulfate in drinking water; however, EPA provides a Secondary MCL of 250 mg/l that is not federally enforceable, and is based on taste considerations. During February 2003, EPA published an "advisory" that "provides an analysis of the current health hazard information and an evaluation of available data on the organoleptic (i.e. taste and odor) problems associated with sulfate-contaminated water, because organoleptic problems will affect consumer acceptance of water sources." The "Advisory" recommends reducing sulfate concentrations in drinking water to or below 250 mg/l to address taste considerations. It also recommends a maximum sulfate concentration in drinking water of 500 mg/l to prevent/avoid health based acute effects (absence of laxative effects). This value depends on the absence of other osmotically active materials in drinking water which could lower the sulfate associated with a laxative effect.

6. Phosphoric acid is a corrosive liquid. Phosphoric acid may be harmful by inhalation, ingestion, or skin absorption. It is destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Inhalation may result in spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. Target Organ(S): Liver,

Blood, Bone Marrow. This information can be found at <http://www.sino-phos.com/images/MSDS%20of%20Phosphoric%20Acid.pdf>.

## **VI. CONCLUSIONS OF LAW AND DETERMINATIONS**

65. RCRA Section 7003(a), 42 U.S.C. § 6973(a), specifies that when EPA receives evidence that the past or present handling, storage, treatment, transportation, or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to human health or the environment, EPA may issue an order against “any person” who has contributed or is contributing to such handling, storage, treatment, transportation, or disposal of the solid waste or hazardous waste. “Any person” includes any past or present generator, past or present transporter, or past or present owner or operator.

66. Respondent is a “person” within the meaning of RCRA Section 1004(15), 42 U.S.C. § 6903(15).

67. Respondent is the “owner” and “operator” of “facilities” located at State Road 137, White Springs, Florida 32096 (Suwannee River Complex), and US Highway 41 N. White Springs, Florida 32096 (Swift Creek Complex), as those terms are defined in 40 C.F.R. § 260.10.

68. Section 1004(27) of RCRA, 42 U.S.C. § 6903(27) defines the term “solid waste” to mean “any garbage, refuse . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations . . .”

69. Section 1004(5) of RCRA, 42 U.S.C. § 6903(5), defines the term “hazardous waste” to mean: a solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

(A) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

70. Pursuant to EPA regulation, a solid waste is a hazardous waste if it is not excluded from regulation as a hazardous waste under 40 C.F.R. § 261.4(b) and it exhibits any of the characteristics of hazardous waste identified in Subpart C of 40 C.F.R. Part 261, or it is listed in Subpart D of 40 C.F.R. Part 261.

71. Characteristic hazardous wastes are assigned “D” codes in 40 C.F.R. Part 261, Subpart C depending on the specific hazardous characteristic that the waste exhibits. A hazardous waste with a pH of less than or equal to 2.0 or greater than or equal to 12.5 exhibits the characteristic of corrosivity and is assigned the D002 hazardous waste code pursuant to 40 C.F.R. § 261.22.



72. Certain solid wastes from the extraction, beneficiation, and processing of ores and minerals are excluded from the definition of hazardous wastes pursuant to 40 C.F.R. § 261.4(b)(7), the “Bevill Exemption.”

73. For a mineral processing solid waste to be excluded from being a hazardous waste under the Bevill Exemption, it must fall into one of the twenty specific categories of excluded wastes listed at 40 C.F.R. § 261.4(b)(7)(ii).

74. The Bevill Exemption applies to only two wastes generated from phosphoric acid mineral processing operations: “(p)hosphogypsum from phosphoric acid production,” 40 C.F.R. § 261.4(b)(7)(ii)(D); and “process wastewater from phosphoric acid production.” 40 C.F.R. § 261.4(b)(7)(ii)(P).

75. When Bevill-exempt phosphogypsum and process wastewater from phosphoric acid production are mixed with hazardous non-exempt wastes, if the resulting mixture continues to exhibit a hazardous characteristic of the non-exempt waste, then the entire mixture is a hazardous waste pursuant to the Bevill Mixture Rule, promulgated at 40 C.F.R. § 261.3(a)(2)(i).

76. EPA contends that Respondent’s process wastewater released after the sinkhole formation on December 10, 2009, contained both Bevill-exempt and non-Bevill-exempt wastewater and was corrosive (pH less than 2 su) and, is therefore, a D002 “hazardous” waste in addition to being a solid waste.

77. Section 1004(3) of RCRA, 42 U.S.C. § 6903(3), defines the term “disposal” to mean “the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.”

78. As a result of the sinkhole collapse on December 10, 2009, PCS has disposed of approximately 68 million gallons of process wastewater and phosphogypsum into the Floridan aquifer.<sup>2</sup> Over time, PCS’s plant production wells will recapture a significant portion of the process wastewater released.

79. EPA has nonetheless determined that the potential exists for an imminent and substantial endangerment to human health and the environment resulting from PCS’s disposal of approximately 68 million gallons of process wastewater and phosphogypsum into the Floridan aquifer, the primary source of drinking water for the local area.<sup>3</sup> In addition, EPA has concluded that there is a significant risk of additional sinkhole formations/collapses across the three PGSSs,

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<sup>2</sup> As noted earlier, in footnote 1, based on PCS’s data, it is likely another 13.9 million gallons were released through seepage between the time the sinkhole formed and the cell collapsed. In addition, there will be approximately another 12 million gallons released through seepage from the time the cell collapsed, until the sinkhole is grouted.

<sup>3</sup> As noted in footnotes 1 and 2, based on PCS’s data, it is likely another 13.9 million gallons were released through seepage between the time the sinkhole formed and the cell collapsed. In addition, there will be approximately another 12 million gallons released through seepage from the time the cell collapsed, until the sinkhole is grouted.

and therefore, because of the likelihood of another release of a large volume of solid and/or hazardous waste from all PGSSs, the PGSSs may present an imminent and substantial endangerment to human health and the environment. Finally, the continued increase in elevation of all three PGSSs increases the volume of phosphogypsum and associated porewater that could be released in the event of any future sinkhole formation/collapse, and therefore presents an imminent and substantial endangerment to human health and the environment.

80. Based upon the foregoing Findings of Fact, and after consideration of the Administrative Record, and pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, EPA made the following determinations:

- a. The wastes at Respondent's Facilities are "solid wastes" within the meaning of Section 1004(27) of RCRA 42 U.S.C. § 6903(27) and/or "hazardous wastes" within the meaning of Section 1004(5) of RCRA, 42 U.S.C. § 6903(5);
- b. The conditions described in the Findings of Fact constitute evidence that Respondent's past and present handling, storage, treatment, transportation and/or disposal of solid and/or hazardous wastes at the Facilities may present an imminent and substantial endangerment to human health and/or the environment within the meaning of Section 7003 of RCRA, 42 U.S.C. § 6973; and
- c. The work required of the Respondent by this Order is necessary to protect human health and the environment from the solid and hazardous wastes at the Facilities.

## **VII. ORDER**

81. EPA has determined that active measures are necessary to reduce exposure of the limestone and aquifer systems underlying the PGSSs to contamination by process wastewater. While grouting sinkholes after formation will mitigate the short-term threat to the environment, long-term risk can be mitigated by taking active measures designed to reduce the volume of water available for loss in the event of additional sinkhole formation/collapse.

82. As a result of the above Findings of Fact and Conclusions of Law and Determinations, and pursuant to the authority in Section 7003 of RCRA, 42 U.S.C. § 6973, EPA has determined that the activities required by this Order are necessary to protect human health and/or the environment; thus, EPA hereby orders Respondent to perform the work specified in Paragraph 83 of the Order below. The plan developed by Respondent, as required by this Order, must meet the goals of reducing seepage through the PGSSs to mitigate the risk of future sinkhole formation/collapse, reducing the PGSS watershed with the intent of optimizing process wastewater inventory and management, and minimizing loss in event of sinkhole formation/collapse in the cooling pond system.

83. Respondent shall analyze, evaluate and develop a plan consisting of a series of projects which are designed to accomplish the purposes articulated in Section IV and specifically address, without limitation: (A) installation of intermediate liners at and/or closure of the Swift Creek

Gypstack, the Dorr-Oliver Gypstack, and the CTC Gypstack; (B) significant reduction of the PGSS watershed with the intent of optimizing process wastewater inventory and management; and (C) significant reduction of process wastewater loss from the cooling ponds in the event of a sinkhole. Phased evaluation and development of the plan must occur within the following timeframes:

- a. Within 30 days of the Effective Date of this Order, Respondent shall submit a list of all options being evaluated by Respondent. Each option shall address all three PCS PGSSs, and shall evaluate plan selection factors such as cost, water balance and stack stability, but need not include an implementation schedule or sequencing of individual projects within each option. Respondent shall include an option for lining the Swift Creek Gypstack System, the CTC Gypstack System and the Dorr-Oliver Gypstack System within 5 years or as soon as possible; and
- b. Within 45 days of EPA's receipt of Respondent's options list (pursuant to Paragraph 83 (a)), EPA shall concur with one or more options and provide concurrence of the options to Respondent in compliance with Section X (Approvals); and
- c. By December 31, 2010, or such later date as agreed to by EPA, Respondent shall complete an internal feasibility study of each option with which EPA has concurred, and shall submit a proposed plan for Respondent's preferred option that contains a series of projects and a proposed schedule for implementing the projects identified in the preferred option; and
- d. Within sixty (60) days of EPA's approval of a proposed plan (which following approval will be referred to as the "Approved Plan"), Respondent shall submit a proposed workplan and a proposed schedule (which will identify permitting requirements and other Florida or other third-party approvals and timeframes, if any) for implementing the first project specified in the Approved Plan. Workplans and schedules for future projects shall be submitted six (6) months prior to the scheduled start date of the project at issue. The projects identified in the Approved Plan shall be completed within the following timeframes: either (1) on or before the expiration of 60 months following EPA's approval of the Approved Plan, or (2) a later date when shown to be as soon as possible.

84. All work performed pursuant to this Order shall be under the direction and supervision of Facility personnel, a Professional Engineer, or a contractor or consultant with the technical expertise sufficient to adequately perform all aspects of the work for which it is responsible.

## **VIII. GENERAL PROVISIONS**

85. All plans and documents submitted under any section of this Order shall, upon approval by EPA, be incorporated by reference into this Order as if set forth fully herein.

86. Respondent has designated a Project Coordinator, as identified below. EPA Region 4 has designated a Project Coordinator, as identified below. The EPA Project Coordinator will be EPA's designated representative for the Facilities. Respondent's Project Coordinator will be Respondent's designated representative for the Facilities. All communications between Respondent and EPA, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to this Order, shall be directed to the Project Coordinator.

The EPA Project Coordinator is:

Bethany Russell  
South Enforcement and Compliance Section  
RCRA and OPA Enforcement and Compliance Branch  
RCRA Division  
U.S. EPA, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303  
russell.bethany@epa.gov  
Office: (404) 562-8542

Respondent's Project Coordinator is:

Stanley W. Posey  
Manager, Environmental Affairs  
White Springs Agricultural Chemicals, Inc.,  
d/b/a PCS Phosphate - White Springs  
PO Box 300  
15843 SE 78th Street  
White Springs, Florida 32096  
sPosey@pcsphosphate.com  
Office: (386) 397-8304  
Fax: (386) 397-8390  
Cell: (386) 397-0524

EPA will provide written notice to the Respondent of any change in the EPA Region 4 Project Coordinator for the Facilities.

87. Respondent shall provide written notice within ten (10) calendar days to EPA prior to changing its Project Coordinator.

## **IX. SUBMITTALS**

88. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Order in accordance with Section IX, Submittals, they shall be made electronically, unless otherwise requested by EPA, to the EPA Region 4 Project Coordinator identified in Paragraph 86 and/or to other addressees she or he designates, unless otherwise specified by EPA. Each submittal shall include reference to the docket number as shown on the first page of this Order.

89. Unless otherwise specified herein, whenever notifications, submissions, or communications are required by this Order in accordance with Section IX, Submittals, they shall be made electronically, unless otherwise requested by FDEP, and addressed as follows:

Tim J. Bahr, Administrator  
Hazardous Waste Regulation Section M.S. 4560  
Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Phone: 850-245-8790  
Email: [tim.bahr@dep.state.fl.us](mailto:tim.bahr@dep.state.fl.us)

John A. Coates, P.E., Chief  
Bureau of Mining and Minerals Regulation  
Department of Environmental Protection  
Division of Water Resource Management  
2051 East Dirac Drive  
Tallahassee, Florida 32312  
Phone: 850-488-8217  
Email: [john.coates@dep.state.fl.us](mailto:john.coates@dep.state.fl.us)

90. Any report, work plan, notice, or other document submitted by Respondent pursuant to this Order which makes any representation concerning Respondent's compliance or noncompliance with any requirement of this Order shall be certified by a responsible officer of Respondent. For purposes of this Order a "responsible officer" shall mean a president, secretary, treasurer, or vice president in charge of a principal business function, or any other person who performs or has been duly delegated similar policy or decision-making functions.

91. The certification required by Paragraph 90 above, shall be in the following form:

"I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to evaluate the information submitted. I certify that the information contained in or accompanying this submittal is true, accurate, and complete. As to those identified portion(s) of this submittal for which I cannot personally verify the accuracy, I certify that this submittal and all attachments were prepared in accordance with procedures designed to assure that

qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

92. The certification shall also include the name, title, date, and signature of the person or persons completing the certification.

#### **X. EPA APPROVALS**

93. EPA will provide Respondent with its written approval, approval with conditions and/or modifications, or disapproval for any inventory list, work plan, report (except progress reports), specification, or schedule submitted pursuant to or required by this Order.

94. Respondent shall revise any inventory list, work plan, report, specification, or schedule in accordance with EPA's written comments within thirty (30) calendar days of Respondent's receipt of EPA's written comments unless EPA has specified an alternative due date, in which case Respondent shall submit to EPA any revised inventory list, work plan, report, specification, or schedule in accordance with the due date specified by EPA. Revised submittals are also subject to EPA approval, approval with conditions and/or modifications, or disapproval. Any revised submittal that is not approved or is not approved with conditions and/or modifications is considered noncompliant with the terms of this Order.

95. Upon receipt of EPA's written approval, Respondent shall commence work and implement any approved work plan in accordance with the schedule and provisions contained therein. If no schedule is contained in an approved work plan, then Respondent shall commence work and implementation of the work plan within fifteen (15) calendar days of receipt of EPA's written approval of the work plan.

96. Any EPA-approved or EPA-approved with conditions and/or modifications inventory list, report, work plan, specification, or schedule shall be incorporated by reference into this Order as if set forth fully herein. Prior to EPA's written approval, no inventory list, work plan, report, specification, or schedule shall be construed as approved and final. Oral advice, suggestions, or comments given by EPA representatives will not constitute an official approval, nor shall any oral approval or oral assurance of approval be considered binding.

97. Noncompliance with any requirements of this Order, including: reports, work plans, specifications, schedules, and attachments approved by EPA pursuant to this Order shall be considered a violation of the requirements of this Order and shall subject Respondent to the statutory penalty provisions and enforcement actions pursuant to Section 7003(b) of RCRA, 42 U.S.C. § 6973(b), and any other applicable sanctions, including the stipulated penalties provisions agreed to in Paragraphs 125-135 of this Order.

98. Any changes or modifications proposed by Respondent to the EPA-approved workplans and timetables required by this Order must be approved or may be modified and approved by EPA prior to implementation.

## **XI. EMERGENCY ACTION**

99. In the event that Respondent identifies a threat to health or the environment at any time during the implementation of this Order which warrants more immediate action than pursuant to any workplan or other requirement of this Order, or warrants action before an otherwise applicable workplan is approved, Respondent shall provide oral notification to the EPA Project Coordinator within twenty-four (24) hours of discovery and notify both EPA and the State in writing within ten (10) calendar days of such discovery, summarizing the nature, immediacy, and magnitude of such threat(s).

100. Proper notification, as required in this Section, does not relieve Respondent of any other notification responsibility Respondent may have under any other law, including, but not limited to, Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, or Section 304 of the Emergency Planning and Community Right to Know Act, as amended.

101. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize and require Respondent to take actions to abate the threat prior to approval of any workplan or in addition to a workplan after approval.

102. If EPA or any other federal, state, or local agency identifies such a threat at the Facilities or at any locations encompassed by this Order at any time during implementation of this Order, EPA will notify Respondent orally and in writing. If EPA determines that immediate action is required, the EPA Project Coordinator may orally authorize and require Respondent to take actions to abate the threat prior to approval of a plan or in addition to a plan after approval.

103. If EPA determines that activities undertaken by Respondent pursuant to this Order, whether in compliance or non-compliance with the Order, have caused or may cause a release of a solid or hazardous waste, or may pose an imminent and substantial endangerment to human health and/or the environment, EPA may direct Respondent in writing to stop further implementation of this Order, or a portion of this Order, for such period of time as may be necessary to abate any such release or endangerment and/or undertake any action which EPA determines to be necessary.

104. Any requirements made pursuant to this Section shall be immediately incorporated into this Order by reference and are immediately enforceable.

## **XII. ADDITIONAL WORK**

105. EPA may determine or Respondent may propose that certain tasks, including investigatory work or procedure/methodology modifications, are necessary in addition to or in lieu of the tasks included in Paragraph 83 of this Order to meet the purposes set forth in this Order. If EPA determines that Respondent shall perform additional work, EPA will specify in writing the basis for its determination that the additional work is necessary. Within thirty (30) calendar days after the receipt of such determination, Respondent shall have the opportunity to meet or confer with EPA to discuss the additional work. If required by EPA, Respondent shall submit for EPA approval a work plan for the additional work. Such work plan shall be submitted within thirty (30) calendar days of receipt of EPA's determination that additional work is necessary, within thirty (30) calendar days of the date of the meeting or conference, if any, between EPA and Respondent to discuss the additional work, or according to an alternative schedule established by EPA, whichever is later. Upon approval of a work plan, Respondent shall implement such work plan in accordance with the schedule and provisions contained therein.

## **XIII. QUALITY ASSURANCE**

106. Where applicable, Respondent/Contractor for Respondent performing sampling and analyses shall comply with the applicable requirements of Chapter 62-160, F.A.C., Quality Assurance. Upon submission of each workplan required by Paragraph 83 (Order), Respondent shall include a section, specific to that workplan, for quality assurance/quality control and, if applicable, chain of custody procedures for all study and/or construction activities. All quality assurance/quality control procedures must adhere to all requirements of Chapter 62-671 through 62-673, F.A.C. Any deviations from the approved workplans must be approved by EPA prior to implementation; must be documented, including reasons for the deviations; and must be reported in the applicable report.

107. The names, addresses, and telephone numbers of those performing work or sampling pursuant to the specified workplan (including the primary contractor and sub-contractors), and analytical laboratories that Respondent proposes to use must be specified in the applicable workplans.

108. Where applicable, workplans required under this Order shall include data quality objectives for each data collection activity to ensure that data of known and appropriate quality are obtained and that data are sufficient to support their intended use(s).

109. Respondent shall monitor to ensure that high quality data are obtained by those performing work or sampling, including consultants or contract laboratories. Where applicable, Respondent shall ensure that laboratories used by Respondent for analyses perform such analyses according to Chapter 62-160, F.A.C., Quality Assurance.



#### **XIV. SAMPLING AND DATA/DOCUMENT AVAILABILITY**

110. Specific to each work plan submitted pursuant to Paragraph 83, Respondent shall include a section that identifies any sampling or tests necessary to ensure conformance with the Quality Assurance or data quality objectives of that workplan.

111. Notwithstanding any other provisions of this Order, EPA retains all of its information gathering and inspection authorities and rights, including the right to bring enforcement actions related thereto, under RCRA, CERCLA, and any other applicable statutes or regulations.

112. Each workplan submitted by Respondent shall identify timeframes for implementation and will provide for notification to EPA and FDEP in writing at least fourteen (14) calendar days before implementation of the work specified in the workplan. If Respondent believes it must commence emergency field activities without delay, Respondent may seek emergency telephone authorization from the EPA Project Coordinator or, if the EPA Project Coordinator is unavailable, his or her immediate supervisor, to commence such activities immediately. If applicable, at the request of EPA, Respondent shall provide, or allow EPA or its authorized representative to take split or duplicate samples of any samples collected by Respondent pursuant to this Order. Similarly, at the request of Respondent, EPA shall allow Respondent or its authorized representative(s) to take split or duplicate samples of all samples collected by EPA under this Order.

113. Respondent may assert a confidentiality claim covering all or part of any information submitted to EPA pursuant to this Order. Any assertion of confidentiality must be accompanied by information that satisfies the items listed in 40 C.F.R. § 2.204(e)(4) or such claim shall be deemed waived. Information determined by EPA to be confidential will be given the protection specified in 40 C.F.R. Part 2. If no such confidentiality claim accompanies the information when it is submitted to EPA, the information may be made available to the public by EPA without further notice to Respondent. EPA will not accept any confidentiality claim with regard to any physical or analytical data.

#### **XV. ACCESS**

114. EPA, its contractors, employees, and/or any EPA representative(s) are authorized to enter and freely move about all property at the Facilities pursuant to this Order for the purposes of, inter alia, interviewing facility personnel and contractors; inspecting records, operating logs, and contracts related to the Facilities; reviewing the progress of the Respondent in carrying out the terms of this Order; conducting such tests, sampling, or monitoring as EPA or its Project Coordinators deem necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to EPA by the Respondent. Respondent shall provide EPA and its representatives access to the Facilities at all reasonable times and, subject to Paragraph 115 below, to any other property to which access is required for implementation of this Order. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and

monitoring data, that pertain to work undertaken pursuant to this Order and that are within the possession or under the control of Respondent or its contractors or consultants.

115. To the extent that work being performed pursuant to this Order must be done on property not owned by Respondent, Respondent shall use its best efforts to obtain site access agreements necessary to complete work required by this Order from the present owner(s) of such property within forty-five (45) calendar days of approval of any workplan for which site access is required. Best efforts as used in this Paragraph shall include, at a minimum, a certified letter from Respondent to the present owner(s) of such property requesting access agreement(s) to permit Respondent and EPA and its authorized representatives access to such property and the offer of payment of reasonable sums of money in consideration of granting such access. Any such access agreements shall be incorporated by reference into this Order and shall provide for access by EPA and its representatives. Respondent shall insure that EPA's Project Coordinator has a copy of any such access agreements. In the event that agreements for access are not obtained within forty-five (45) calendar days of approval of any workplan for which access is required, or of the date that the need for access became known to Respondent, Respondent shall notify EPA in writing within ten (10) calendar days thereafter of both the efforts undertaken to obtain access and the failure to obtain such agreements. EPA may, at its discretion, assist Respondent in obtaining access. In the event EPA obtains access, Respondent shall undertake EPA-approved work on such property. The Respondent shall indemnify EPA as provided in Section XXIV, below, for any and all claims arising from activities on such property.

116. Nothing in this Section limits or otherwise affects EPA's right of access and entry pursuant to applicable law, including RCRA and CERCLA.

117. Nothing in this Section shall be construed to limit or otherwise affect Respondent's liability and obligation to perform corrective measures, notwithstanding the lack of access.

## **XVI. RECORD PRESERVATION**

118. Respondent shall retain, during the pendency of this Order and for a minimum of six (6) years after its termination, all data, records, and documents now in its possession or control or which come into its possession or the possession of its divisions, officers, directors, employees, agents, contractors, successors, and assigns which relate in any way to this Order. Subsequent to the termination of the aforementioned six (6) year period, Respondent shall provide written notification to EPA sixty (60) calendar days prior to the destruction of any data, records, or documents that relate in any way to this Order or its implementation. At EPA's request, Respondent shall then make such records available to EPA for inspection and/or EPA's retention or shall provide copies of any such records to EPA prior to discarding. Such written notification shall reference the effective date, caption, and docket number of this Order and shall be addressed to:

Larry Lamberth, Chief  
South Enforcement and Compliance Section  
RCRA and OPA Enforcement and Compliance Branch  
RCRA Division  
U.S. EPA, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

119. Within ten (10) calendar days of the effective date of this Order, or at the time of retaining or employing any agent, consultant, or contractor for the purpose of carrying out the terms of this Order, Respondent shall enter into an agreement with any such agents, consultants, or contractors whereby such agents, consultants, or contractors will be required to provide Respondent a copy of all documents produced pursuant to this Order.

120. All documents pertaining to this Order shall be stored in a designated area as determined by the Respondent in a centralized location to afford ease of access by EPA or its representatives.

121. All data, information, and records pertaining to, created for, or maintained by Respondent in connection with this Order shall be made available to EPA upon request. All employees of Respondent and all persons, including contractors and subcontractors, who engage in activity under this Order shall be made available to and shall cooperate with EPA if information is sought.

## **XVII. DISPUTE RESOLUTION**

122. Any disputes concerning deliverables required under this Order, excluding any final agency action issued by EPA, shall be raised to EPA within 15 days after receiving comments on the deliverable. Disputes will be resolved as follows: EPA and Respondent shall expeditiously and informally attempt to resolve any disagreements concerning the performance of the Work. The Project Coordinators shall first confer in an effort to resolve the dispute. If the Project Coordinators are unable to informally resolve the dispute within 14 days, Respondent shall notify EPA in writing of its objections. The Respondent's written objections shall define the dispute and state the basis of Respondent's objections. EPA and Respondent then have an additional 14 days to reach agreement. If an agreement is not reached within 14 days, Respondent may request a determination by EPA Region 4's RCRA Division Director. The Division Director's determination is EPA's final decision. Respondent shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Respondent agrees with the decision. If Respondent does not agree to perform or does not actually perform the Work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the work itself, to seek reimbursement from Respondent, to seek enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief. The validity of this Order may not be subjected to judicial review until such time as the United States goes to court to enforce this Order.

123. If EPA and Respondent reach agreement on a dispute at any stage, the agreement shall be set forth in writing, and shall upon signature of EPA and Respondent, be incorporated into and become an enforceable part of this Order.

124. The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to the Order during the pendency of the dispute resolution process except as agreed by EPA in writing. The invocation of dispute resolution does not stay stipulated penalties under this Order, unless the delay is a result of EPA's failure to timely issue a written resolution of the dispute.

### **XVIII. DELAY IN PERFORMANCE/PENALTIES**

125. Stipulated Penalties: Respondent shall be liable for stipulated penalties in the amounts set forth in this Section any time that Respondent fails to comply with any requirement of this Order applicable to it, unless a Force Majeure has occurred as defined in Section XIX (Force Majeure) and EPA has approved the extension of a deadline as required by Section XIX (Force Majeure). Compliance by Respondent shall include completion of an activity or any matter under this Order in a manner acceptable to EPA, and within the specified time schedules approved under this Order.

126. Unless there has been a written modification of a schedule herein by EPA, or the Force Majeure provisions of this Order are invoked, in the event Respondent fails to meet any schedule or requirement contained in this Order applicable to it, as originally issued or as subsequently modified by EPA, including inadequate or late submittals, EPA may assess a stipulated penalty and the Respondent shall pay, upon written notification by EPA that a stipulated penalty is due and owing, a stipulated penalty as follows:

Period of Failure to Comply	Penalty Per Violation Per Day
Days 1-15	\$ 1,500.00
Days 16-30	\$ 3,000.00
Over 30 days	\$ 5,000.00

127. Stipulated Penalties under this Section shall be paid within thirty (30) days after Respondent's receipt of written notification that stipulated penalties are due and owing from EPA. Such Stipulated Penalties shall be paid by cashier's check, certified check, company check, by electronic funds transfer (EFT), or by Automated Clearhouse (ACH) (also known as REX or remittance express). If paying by check, the check shall be payable to: **Treasurer, United States of America**, and the facility name and docket number for this matter shall be referenced on the face of the check. If Respondent sends payment by the United States Postal Service, the payment shall be addressed to:

United States Environmental Protection Agency  
Fines and Penalties  
Cincinnati Finance Center  
P.O. Box 979077  
St. Louis, Missouri 63197-9000

If the Respondent sends payment by non-United States Postal express mail delivery, the payment shall be sent to:

United States Bank  
Government Lockbox 979077  
United States Environmental Protection Agency  
Fines and Penalties  
1005 Convention Plaza  
SL-MO-C2-GL  
St. Louis, Missouri 63101  
(314) 418-1028

If paying by EFT, the Respondent shall transfer the payment to:

Federal Reserve Bank of New York  
ABA: 021030004  
Account Number: 68010727  
SWIFT address: FRNYUS33  
33 Liberty Street  
New York, New York 10045  
Field Tag 4200 of the Fedwire message should read:  
"D 68010727 Environmental Protection Agency"

If paying by ACH, the Respondent shall remit payment to:

PNC Bank  
ABA: 051036706  
Account Number: 310006  
CTX Format Transaction Code 22 – checking  
United States Environmental Protection Agency  
808 17<sup>th</sup> Street, N.W.  
Washington, D.C. 20074  
Contact: Jesse White, (301) 887-6548

128. Docket No. RCRA-04-2010-4250 should be clearly typed on the check to ensure proper credit. Respondent shall send simultaneous notices of such payments, including copies of the certified check, company check, electronic funds transfer, or cashier's check to the following:

Regional Hearing Clerk  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8909

And to:

Larry L. Lamberth, Chief  
South Section, RCRA and OPA Enforcement and Compliance Branch  
RCRA Division  
United States Environmental Protection Agency, Region 4  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8909

129. Respondent may dispute EPA's assessment of stipulated penalties by invoking the dispute resolution procedures under Section XVII (Dispute Resolution) unless the matter has already been in dispute resolution. Penalties shall accrue but need not be paid during the dispute resolution period. If the Respondent does not prevail upon resolution, all penalties shall be due to EPA within 30 days of resolution of the dispute. If the Respondent prevails upon resolution, no penalties shall be paid.

130. Neither the invocation of dispute resolution nor the payment of penalties shall alter in any way Respondent's obligation to comply with the terms and conditions of this Order.

131. If EPA does not receive payment within 30 days of the due date, interest will accrue on the amount due from the due date per annum through the date of payment at the current annual rate prescribed and published by the Secretary of the Treasury, pursuant to 31 U.S.C. § 3717, in the Federal Register and the Treasury Fiscal Requirements Annual Bulletin.

132. If the payment is overdue, EPA will also impose a late-payment handling charge of \$15.00, with an additional delinquent notice charge of \$15.00 for each subsequent 30-day period over which an unpaid balance remains. A penalty of 6% per annum will be assessed on any unpaid penalty amount not paid within 90 or more days of Respondent's receipt of the notification of non-compliance.

133. The Stipulated Penalties set forth in this Section do not preclude EPA from pursuing any other remedies or sanctions which may be available to EPA by reason of Respondent's failure to comply with any of the requirements of this Order.

134. No payments under this Section shall be deducted for federal tax purposes.

135. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Order.

136. Statutory Penalties. Violation of any provision of this Order may subject Respondent to statutory penalties of seven thousand five hundred dollars (\$ 7,500.00) per violation per day. The assessment of penalties is provided for in Section 7003(b) of RCRA, 42 U.S.C. § 6973(b). However, every four years adjustments to the penalty amount are required by the Federal Civil Penalties Inflation Adjustment Act of 1990, as amended by the Debt Collection Improvement Act of 1996. 28 U.S.C. § 2461. Should Respondent violate this Order or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, or other applicable authorities, and/or may seek judicial enforcement of this Order or penalties pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973.

## **XIX. FORCE MAJEURE**

137. Respondent shall perform all requirements under this Order with the time limits established under this Order, unless the performance is delayed by a force majeure. For purposes of this Order, a force majeure is defined as any event arising from causes beyond the anticipation or control of the Respondent, including but not limited to acts of nature (*e.g.*, greater than 100 year rain events, floods, hurricanes) and acts of people (*e.g.*, riots, strikes, wars, terrorism), directive, or industry wide request by any government or governmental authority or government rule, that delays or prevents performance of any obligation under this Order despite Respondent's best efforts to fulfill the obligation. Force majeure does not include financial inability to complete the Work or increased cost of performance or any changes in Respondent's business or economic circumstances.

138. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall notify EPA within 48 hours of when the Respondent knew or should have known that the event might cause a delay. Such notice shall: identify the event causing the delay, or anticipated to cause delay, and the anticipated duration of the delay; provide Respondent's rationale for attributing such delay to a force majeure event; state the measures taken or to be taken to prevent or minimize the delay; estimate the timetable for implementation of those measures; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health or the environment. Respondent shall undertake best efforts to avoid and minimize the delay. Failure to comply with the notice provision of this action shall waive any claim of force majeure by the Respondent. Respondent shall be deemed to have notice of any circumstances of which its contractors had or should have had notice.

139. If EPA determines that a delay in performance or anticipated delay of a requirement under this Order is or was attributable to a force majeure, then the time period for performance of that requirement will be extended as deemed necessary by EPA. If EPA determines that the delay or anticipated delay has been or will be caused by a force majeure, then EPA will notify Respondent, in writing, of the length of the extension, if any, for performance of such obligations affected by the force majeure. Any such extensions shall not alter Respondent's obligation to perform or complete other tasks required by the Order which are not directly affected by the force majeure.

140. If EPA disagrees with Respondent's assertion of a force majeure, then Respondent may elect to invoke the dispute resolution provision, and shall follow the procedures set forth in Section XVII (Dispute Resolution). In any such proceeding, Respondent shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that best efforts were exercised to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of this Section. If Respondent satisfies this burden, then the time for performance of such obligation will be extended by EPA for such time as is necessary to complete such obligation as determined by EPA.

## **XX. RESERVATION OF RIGHTS**

141. EPA expressly reserves all rights and defenses that it may have, including the rights both to disapprove work performed by Respondent pursuant to this Order and to request that Respondent performs tasks in addition to those stated in the Order (Section VII) above.

142. EPA hereby reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Respondent's failure to comply with any of the requirements of this Order, including without limitation the assessment of penalties under Section 7003(b) of RCRA, 42 U.S.C. § 6973(b). This Order shall not be construed as a covenant not to sue, release, waive, or limit any rights, remedies, powers, and/or authorities, civil or criminal, which EPA has under RCRA, CERCLA, or any other statutory, regulatory, or common law authority of the United States. Nothing in this Order shall diminish, impair, or otherwise adversely affect the authority of EPA to enforce the provisions of this Order.

143. This Order shall not limit or otherwise preclude EPA from taking additional enforcement action pursuant to the RCRA, or any other available legal authority, should EPA determine that such action is warranted and necessary to protect human health and the environment.

144. EPA reserves the right to perform any portion of the work set forth herein, or any additional site characterization, feasibility study, and/or remedial work, as it deems necessary to protect human health and/or the environment.

145. If EPA determines that activities in compliance or noncompliance with this Order have caused or may cause a release of hazardous waste or hazardous constituents or may pose a threat to human health and/or the environment, or if EPA determines that Respondent is not capable of undertaking any of the work ordered, EPA may order Respondent to stop further implementation of this Order for such period of time as EPA determines to be necessary to abate any such release or threat and/or to undertake any additional corrective measure.

146. This Order is not intended to be nor shall it be construed as a permit. Approval of any work plan does not constitute a warranty or representation that the work plans will achieve the required cleanup or performance standards. Compliance by Respondent with the terms of this Order shall not relieve Respondent of its obligations to comply with RCRA or any other



applicable local, state, or federal laws and regulations, including but not limited to, its obligation to obtain and/or comply with any permit issued under RCRA or any other applicable local, state, or federal laws or regulations; nor is this Order intended to be, nor shall this Order be construed to be, a ruling or determination on, or of, any issue related to any local, State, or federal permit.

## **XXI. OTHER CLAIMS**

147. Nothing in this Order shall constitute or be construed as a release from any claim, cause of action, demand, or defense in law or equity against any person, firm, partnership, or corporation for any liability it may have arising out of, or relating in any way to, the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous wastes or pollutants or contaminants found at, taken to, or taken or migrating from the Facilities.

148. By issuance of this Order, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by the Respondent or its directors, officers, employees, agents, successors, trustees, receivers, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Order.

149. The Parties shall bear their own costs and attorney fees.

150. In any subsequent administrative or judicial proceeding initiated by the United States for injunctive or other appropriate relief relating to the Facilities, Respondent shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim splitting, or other defenses based upon any contention that the claims raised by the United States in the subsequent proceeding were or should have been raised in the present matter.

## **XXII. OTHER APPLICABLE LAWS**

151. All actions required to be taken pursuant to this Order shall be undertaken in accordance with the requirements of all applicable local, State, and federal laws and regulations. Respondent shall obtain or cause its representatives to obtain all permits and approvals necessary under such laws and regulations to perform work pursuant to this Order and shall submit timely applications and requests for any such permits and approvals.

## **XXIII. FINANCIAL ASSURANCE**

152. In order to ensure the full and final completion of the Work to be performed under this Order, Respondent shall demonstrate proof of Financial Assurance in accordance with Chapter 62-673, F.A.C. (hereinafter "Financial Assurance").

153. Financial Assurance will be provided to address any Work in the Approved Plan for which proof of Financial Assurance has not otherwise been established.

154. Respondent shall submit an original copy of any documents required by this Section to Bob Stewart, (404) 562-8886, at [Stewart.RobertG@epa.gov](mailto:Stewart.RobertG@epa.gov) for review, pursuant to Section X (EPA Approvals).

155. Respondent's inability to demonstrate proof of Financial Assurance for completion of the Work shall in no way excuse performance of any other requirements of this Order, including, without limitation, Respondent's obligation to complete the Work in strict accordance with the terms of this Order.

156. Release of Financial Assurance. Respondent may submit a written request to the Director, RCRA Division, EPA Region 4, that EPA release Respondent from the requirement to maintain financial assurance under this Section at such time as EPA has provided written notice, pursuant to Section XXX (Termination and Satisfaction) that Respondent has demonstrated that all the terms of this Order have been addressed to the satisfaction of EPA. The Director, RCRA Division, shall notify the Respondent in writing that Respondent is released from all financial assurance obligations under this Order.

#### **XXIV. INDEMNIFICATION**

157. Respondent shall indemnify and save and hold harmless EPA, its agents, and employees from any and all claims or causes of action arising solely from, or on account of, acts or omissions of Respondent or its officers, employees, agents, independent contractors, receivers, trustees, and/or assigns in carrying out activities required by this Order. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Respondent, EPA, or the United States under their various contracts.

#### **XXV. SUBSEQUENT MODIFICATION**

158. Except for Modification of a work plan by EPA, this Order may only be modified by mutual agreement of EPA and Respondent. Any agreed modifications shall be in writing, shall be signed by the parties, shall have as their effective date the date on which they are signed by EPA, and shall be incorporated into this Order.

159. No informal advice, guidance, suggestion, or comment by EPA regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain such formal approval as may be required by this Order, and to comply with all requirements of this Order unless it is formally modified. Any deliverables, plans, technical memoranda, reports, specifications, schedules and attachments required by this Order are, upon approval by EPA, incorporated into this Order.

#### **XXVI. SEVERABILITY**

160. If any provision or authority of this Order, or the application of this Order to any party or circumstance, is held by any judicial or administrative authority to be invalid, the application of

such provisions to other parties or circumstances and the remainder of the Order shall remain in force and shall not be affected thereby.

## **XXVII. SURVIVABILITY/PERMIT INTEGRATION**

161. A Consent Decree may be entered into between PCS and the United States, or a permit issued under State or federal law may be issued to the Facilities incorporating the requirements of this Order.

162. Any requirements of this Order shall not terminate upon the entry of a Consent Decree or issuance of a State or federal permit or permit modification, unless all Order requirements are expressly incorporated by the requirements in the Consent Decree or permit or all provisions of this Order have been fully complied with to the EPA's satisfaction as per Section XXX (Termination and Satisfaction) of this Order.

## **XXVIII. PUBLIC COMMENT ON THIS ORDER**

163. Final acceptance by EPA of this Order shall be subject to Section 7003(d) of RCRA, 42 U.S.C. § 6973(d), which requires EPA to provide notice, opportunity for a public meeting and a reasonable opportunity to comment on the proposed settlement. After consideration of any comments submitted during a public comment period of not less than 15 days (may be extended by EPA) held pursuant to Section 7003(d) of RCRA, EPA may withhold consent to all or part of this Order if comments received disclose facts or considerations which indicate that this Order is inappropriate, improper, or inadequate.

164. EPA will provide the public with an opportunity to review and comment on the work required under the Order. In the event significant interest is expressed during the public comment period, a public meeting may be held to facilitate community participation. After consideration is given to the public's comment on the proposed corrective measures, EPA will develop the Final Decision and Response to Comments (RTC) to document the selected corrective measure(s), EPA's justification for such selection, and response to the public's comment. Additional public involvement may be necessary, based on Respondent's specific circumstances.

165. Following the public comment period, EPA may require Respondent to perform additional work. If EPA requires such, the revised Order will be subject to public review and comment.

## **XXIX. EFFECTIVE DATE OF ORDER**

166. This Order becomes effective upon EPA's signature, after the close of the public comment period and EPA's consideration of any comments submitted pursuant to the public comment period.

167. Respondent's obligation to perform the work will begin on the Effective Date of this Order.

### **XXX. TERMINATION AND SATISFACTION**

168. The provisions of this Order, with the exception of the Record Preservation Section, shall be deemed satisfied upon Respondent's receipt of written notice from EPA that Respondent has demonstrated, to the satisfaction of EPA, that the terms of this Order, including any additional tasks determined by EPA to be required pursuant to this Order or any continuing obligation or promises, have been satisfactorily completed.

### **XXXI. SIGNATURES**

WHITE SPRINGS AGRICULTURAL CHEMICALS, INC., d/b/a/ PCS PHOSPHATE –  
WHITE SPRINGS

Date:

April 27, 2010

By:

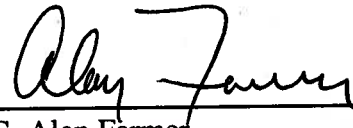
  
Thomas J. Regan, Jr.  
President

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4

Date:

June 2, 2010

By:

  
G. Alan Farmer  
Director  
RCRA Division

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing RCRA 7003 Order, DOCKET NO. RCRA-04-2010-4250, to be served upon the persons designated below on the date below, by causing said copies to be deposited in the U.S. Mail, First Class (Certified Mail, Return Receipt Requested, postage prepaid), at Atlanta, Georgia, in envelopes addressed to:

Karin S. Torain  
Senior Counsel  
PCS Administration (USA), Inc.  
Suite 400  
1101 Skokie Boulevard  
Northbrook, Illinois 60062  
T: 847-849-4291  
F: 847-849-4663  
kstorain@potashcorp.com

I have further caused the original and one copy of the RCRA 7003 and the Certificate of Service to be filed with Joan Redleaf Durbin, Senior Attorney, United States Environmental Protection Agency, Region 4, 61 Forsyth Street, SW, Atlanta, Georgia, 30303, on the date specified below.

This is said person's last known address to subscriber.

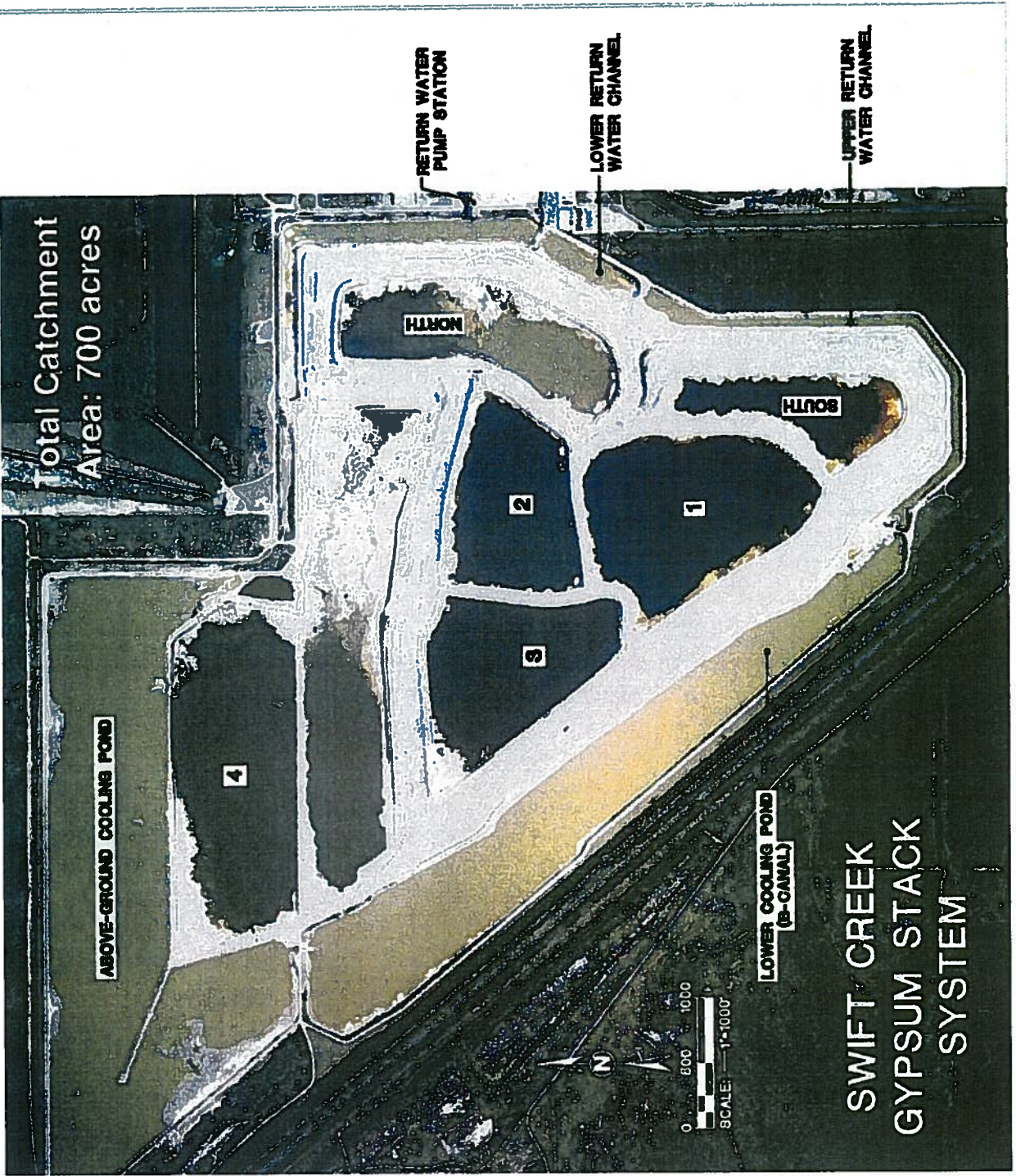
Dated this \_\_\_\_\_ day of \_\_\_\_\_, 2010.

---

Office Automation Assistant  
RCRA Enforcement and Compliance Branch  
RCRA Division

# FIGURE 1





Total Catchment  
Area: 700 acres

ABOVE-GROUND COOLING POND

NORTH

RETURN WATER  
PUMP STATION

LOWER RETURN  
WATER CHANNEL

UPPER RETURN  
WATER CHANNEL

SOUTH

2

1

3

4

LOWER COOLING POND  
(B-CANAL)

SWIFT CREEK  
GYPSUM STACK  
SYSTEM

0 500 1000  
SCALE: 1"=1000'

## FIGURE 2

---

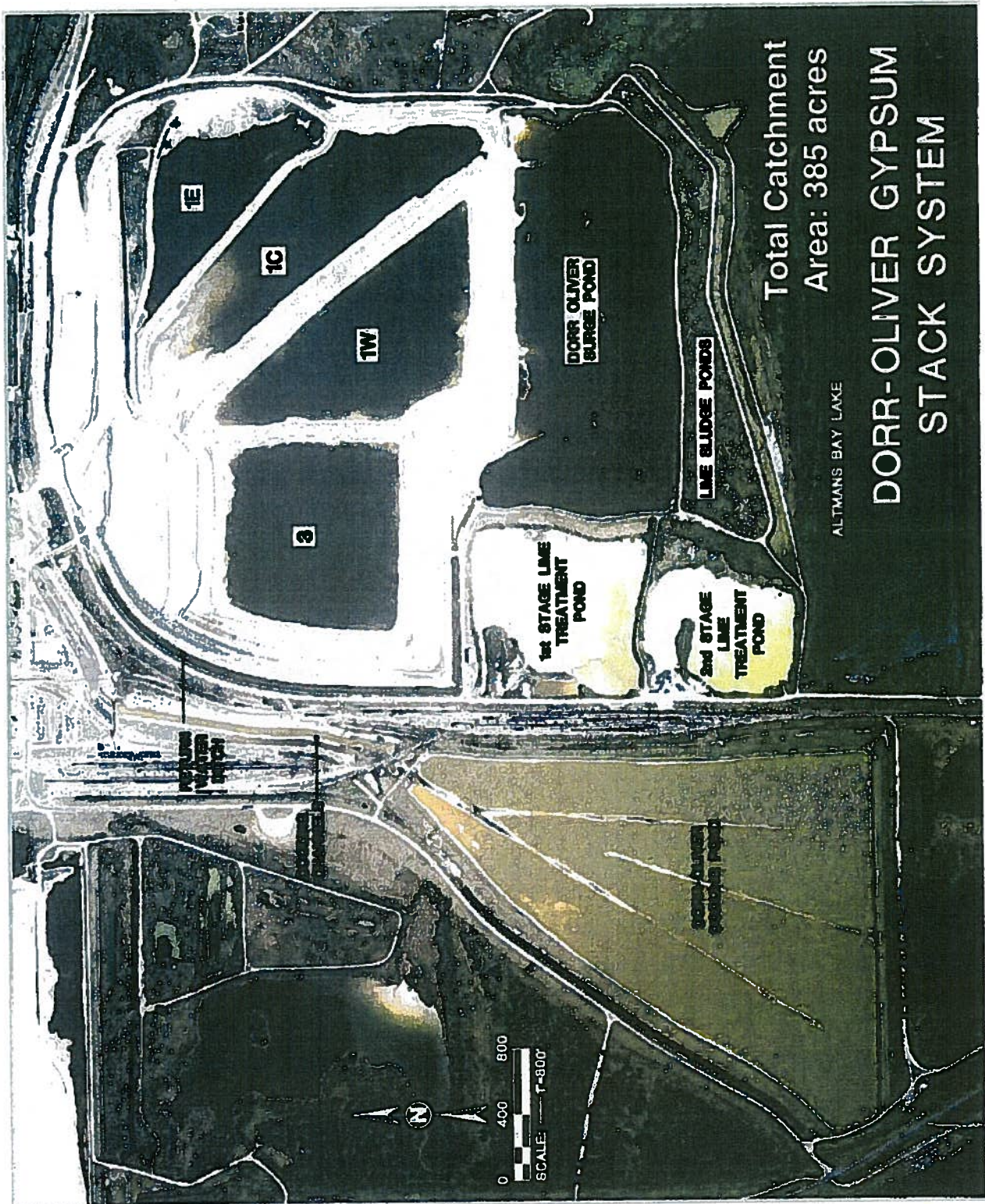




## FIGURE 3

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Total Catchment  
Area: 385 acres

ALTHANS BAY LAKE

# DORR-OLIVER GYPSUM STACK SYSTEM

## FIGURE 4

---







## Enclosure 2

### PCS 7003 Public Comments and EPA Responses



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JUN 2 2010

Ms. Kristi Patel  
via email/pdf to:  
kristipatel@comcast.net

Dear Ms. Patel:

The United States Environmental Protection Agency, Region 4 (EPA) received your written comment email dated May 13, 2010. Your letter was submitted to EPA during the May 3, 2010 to May 20, 2010, public comment period on EPA's proposed Resource Conservation and Recovery Act (RCRA) Section 7003 Imminent Hazard Order on consent to be issued to PCS Phosphate – White Springs, located in White Springs, Florida.

EPA appreciates your concerns, and clarifies that the purpose of this Order is to address issues related to sinkhole formation beneath the three phosphogypsum stacks and cooling ponds at PCS's two White Springs chemical complexes. Enclosed, please find the final executed EPA RCRA Section 7003 Order that became effective on the date of signature by the EPA Region 4 RCRA Division Director. As PCS performs the analyses and implements the work required by the Order, EPA will keep you and the rest of the community apprised of its progress.

Please feel free to contact me at (404) 562-8542, or Joan Redleaf Durbin, the attorney assigned to this case, at (404) 562-9544 if you have further questions in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Bethany Russell", with a large, stylized flourish at the end.

Bethany Russell  
Environmental Scientist

Enclosure

cc: Karin S. Torain, PCS Administration (USA)  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP

Re: PCS  
kristipatel  
to:  
Bethany Russell  
05/13/2010 11:20 AM  
Show Details

History: This message has been forwarded.  
Ms. Russell,

Pursuant to the action of EPA Region 4 contained in this email, I would like to state the following:

It appears quite logically and indicated by science that we, the citizens of ; the regulatory environmental departments of ; and the legislative decision-making body of THE STATE OF FLORIDA, have been historically amiss re. the OBJECTIVE collection and application of scientific data to provide up-to-date best assurances to public and environmental health.

We have relied on industry generated/information as a monopoly to make regulatory decisions due to fiscal limitations of state budgets....which are also impacted by this industry lobby.

I formally request..that AT THIS TIME, we not only respond to this potentially catastrophic incident with future impacts upon existing process...but that we justifiably respond to this impact with SOLID RE-CONSIDERATION RE. the present permitting requirements based on archaic science which would not meet twenty-first century peer review apart from the contracted scientists and professionals associated with this industry, where bias and desirable outcome is intrinsic and lacking any objectivity that the CONSTITUENTS of this state of Florida/SHAREHOLDERS ( who have not historically been represented in this venue/nor understand the technological implications) should and would require had they been adequately informed by PUBLIC SERVANTS.

I quote Lisa Jackson EPA Administrator regarding regulation of toxic substances in water in Time Magazine April 12, 2001, "The only fix is to change this law or modernize it, says EPA Administrator Lisa Jackson."

To further state and endorse this point from Scientific Professional Community from this same article re. industries over-reaching influence upon regulatory data it was stated that FDA's response to a scientific report was..."that report was criticized by the agency's own review board for relying almost exclusively on industry-funded studies."

We rely on industry self reporting and contracted scientific professionals in our determining of impact. The 83 million gallons of contaminated water did not specify gypsum stack loss in pounds nor with the other stacks showing impediments which show mass loss...the historical loss of solids into aquifer before complete sink hole blows out is not a consideration.

We continue to "add on" materials which patch up the scientific indication of loss. There is not an "objective" scientist on this planet who would or could suggest that due to the karst geological make-up of this states' strata that ANY..land could support the weight of these historically permitted edifices.

Please duly note this as a citizen response. There should be more objections stated however moratorium is suggested to concertedly RE-EVALUATE present regulatory process.

Please further note that the 1978 Severance Tax and Inception of Florida Phosphate Research Institute was solely and independently written by Phosphate Industry through lobbyists. That practice is absolutely meeting criteria of corruption in legislative process as outlined in GOVERNMENT ACCOUNTABILITY PROJECT. This was again blatantly noted in the 2008 Expedited Summary Process, that was again written and languaged



by a Phosphate Lobbyist. This is NOT twenty-first century business as usual and I strongly urge in light of the growing concern prioritized for our natural resources that higher Administrative Personnel along with Law Process consider this opportunity for long needed change.

Thank you,

Kristi L. Patel

<http://www.epa.gov/region4/waste/rcra/PublicNotices.htm>

Bethany Russell, Environmental Scientist  
South Enforcement and Compliance Section  
RCRA/OPA Enforcement and Compliance Branch  
U.S. E.P.A. - Region 4  
Sam Nunn Atlanta Federal Center  
61 Forsyth St, SW  
10th floor  
Atlanta, GA 30303  
Office: 404-562-8542  
Cell: 678-641-5003

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**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JUN 2 2010

Mrs. Xenia Harris  
14827 SE 87<sup>th</sup> Street  
White Springs, Florida 32096

Dear Mrs. Harris:

The United States Environmental Protection Agency, Region 4 (EPA) received your written comment email dated May 12, 2010. Your comment was submitted to EPA during the May 3, 2010 to May 20, 2010, public comment period on EPA's proposed Resource Conservation and Recovery Act (RCRA) Section 7003 Imminent Hazard Order on consent to be issued to PCS Phosphate – White Springs, located in White Springs, Florida.

In your letter, you reference concern about both your and your son's drinking water wells, as your homes are located downgradient from PCS's Swift Creek Chemical Complex, where the sinkhole occurred. EPA appreciates your concern and referred your request for well testing to the Florida Department of Health in White Springs. To clarify, the purpose of the Order is to address issues related to sinkhole formation beneath the three phosphogypsum stacks and cooling ponds at PCS's two White Springs chemical complexes. It is EPA's intent that in addition to addressing sinkhole formation, groundwater quality will be determined in and around the chemical complexes through PCS's ongoing groundwater monitoring, the investigations that will be necessary for PCS to implement the work required by this Order, and through continued groundwater, surface water, soil, and sediment investigations being performed by PCS pursuant to an EPA RCRA Section 3013 Monitoring, Analysis, and Testing Consent Order.

Enclosed, please find the final executed EPA RCRA Section 7003 Order that became effective on the date of signature by the EPA Region 4 RCRA Division Director. As PCS performs the analyses and implements the work required by the Order, EPA will keep you and the rest of the community apprised of its progress.

Please feel free to contact me at (404) 562-8542, or Joan Redleaf Durbin, the attorney assigned to this case, at (404) 562-9544 if you have further questions in this matter.

Sincerely,

Bethany Russell  
Environmental Scientist

Enclosure

cc: Karin S. Torain, PCS Administration (USA)  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP



Concerned about our drinking water  
JD Harris to: Bethany Russell

05/12/2010 08:33 AM

History: This message has been forwarded.

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Hi Bethany

We are concerned about our drinking water, it is full of an orange residue and it turned my fingernails orange. We are told that it is rust, but it is from a 200' deep well. A lot of our surrounding neighbors have the same problem. ( needs to be tested)

Also, Swift Creek is close by and about a year ago it went dry for a short while and we heard that PCS had diverted it for some reason. Should they be able to do this?

Thank you for your help in this issue. It is so good to have someone to bring these concerns to.

Xenia Harris  
14827 SE 87th St  
White Springs, FL 32096

(386) 855-4979

Jason Harris  
14816 SE 87th St  
White Springs, FL 32096  
repairmanjason@gmail.com

(386) 855-4976

✓



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JUN 2 2010

Mr. Dock Glawson  
114 Ocmulgee Springs Drive  
Macon, Georgia 31211

Dear Mr. Glawson:

The United States Environmental Protection Agency, Region 4 (EPA) received your written comment letter dated May 20, 2010. Your letter was submitted to EPA during the May 3, 2010 to May 20, 2010, public comment period on EPA's proposed Resource Conservation and Recovery Act (RCRA) Section 7003 Imminent Hazard Order on consent to be issued to PCS Phosphate – White Springs (PCS), located in White Springs, Florida.

In your letter and in phone conversations, you referenced concern about groundwater contamination, both in the surficial and Floridan aquifers, and request that EPA or PCS perform sampling at the ten (10) drinking water wells within your property. EPA understands that you own a hunting and fishing operation known as Bienville Plantation which is located within the PCS Hamilton County Mine area. Although the direct purpose of the Order is to address issues related to sinkhole formation beneath the three phosphogypsum stacks and cooling ponds at PCS's two White Springs chemical complexes, it is EPA's intent that in addition to addressing sinkhole formation, groundwater quality will be determined in and around the chemical complexes through PCS's ongoing groundwater monitoring, the investigations that will be necessary for PCS to implement the work required by this Order, and through continued groundwater, surface water, soil, and sediment investigations being performed by PCS pursuant to an EPA RCRA Section 3013 Monitoring, Analysis, and Testing Consent Order.

Enclosed, please find the final executed EPA RCRA Section 7003 Order that became effective on the date of signature by the EPA Region 4 RCRA Division Director. As PCS performs the analyses and implements the work required by the Order, EPA will keep you and the rest of the community apprised of its progress.

Please feel free to contact me at (404) 562-8542, or Joan Redleaf Durbin, the attorney assigned to this case, at (404) 562-9544 if you have further questions in this matter.

Sincerely,

Bethany Russell  
Environmental Scientist

Enclosure

cc: Karin S. Torain, PCS Administration (USA)  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP

Internet Address (URL) • <http://www.epa.gov>

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Bethany Russell  
South Enforcement and Compliance Section  
RCRA & OPA Enforcement and Compliance Section  
RCRA Division  
U.S. EPA, Region 4  
61 Forsyth Street, SW  
Atlanta GA. 30303

May 20, 2010

**RE:    RESPONSE TO -        ADMINISTRATIVE ORDER ON CONSENT  
                                 EPA ID NO. FLD 098 372 360**

Dear Ms. Russell,

I am writing to inform you of the unique nature of our ongoing business operations within the PCS phosphate mining operation in Hamilton County Florida so that you will be aware of our activities in connection with your ongoing investigation. Our operations involve significant amount of human, wildlife, and recreational activity within the mine boundary compared to almost any other phosphate mining and processing operation in the country. Our activities, described below, require that water quality support recreation and environmental standards consistent with Federal and Florida law.

Glawson Investments has owned 14,000+ acres within the PCS Hamilton County mine since 1990. Since 1996, Glawson Investments has operated a well known hunting and fishing operation called Bienville Plantation (hereinafter referred to as BP). Glawson Investments and PCS operate their respective businesses within the mine boundary subject to an Operating Agreement that is intended to provide for reasonable cooperation and minimize impacts to each parties' operations. Currently, BP has ten (10) deep water wells used for either drinking, food consumption, and/or recreational purposes located within or adjacent to PCS mine boundary. As you suggested, BP will make available for testing of all these wells at your earliest convenience. Of the 14,000 + acres, BP has approximately 2,500+/- acres of either reclaimed or un-reclaimed water-bodies. Since the initial gypsum stack failure in May 2007, BP has had approximately 5,318 guest lodging nights in cabins located on one these of the reclaimed lakes known as Lake Purvis ([www.bienville.com/pages/lodging/pictures/index.php](http://www.bienville.com/pages/lodging/pictures/index.php)). BP also has had over 25,043 activities/man days located within the PCS mine boundary during that period. The activities include breakfast, lunch, dinner, guided fishing, etc. In addition to those activities BP also has unguided fishing and duck hunting trips by members on many of these water-bodies. Based on my initial review of the member's usage we average approximately 18 boats a week with two guests per boat. From May 2007 to May 2010 this equates to 5,616 man days on those water-bodies. Many of the fishing members keep bream, crappie and catfish for human consumption, and the duck hunters keep the harvested ducks for human consumption.

In connection with our business operations over the past several years we have retained consultants from time to time to test and evaluate the water quality of Lake Purvis and certain other BP lakes. These consultants have included a biologist, limnologist, environmental engineers, and a water resources engineer, two of which are former bureau chiefs of the FDEP Bureau of Mines and Reclamation. My understanding from our consultants is that in the first quarter of 2009, Lake Purvis, which is a reclaimed and released lake, failed to meet World Health Organization standards for recreational waters due to excessive algal blooms. The cause has been the source of some dispute between BP and PCS. In any event, I understand that the FDEP has

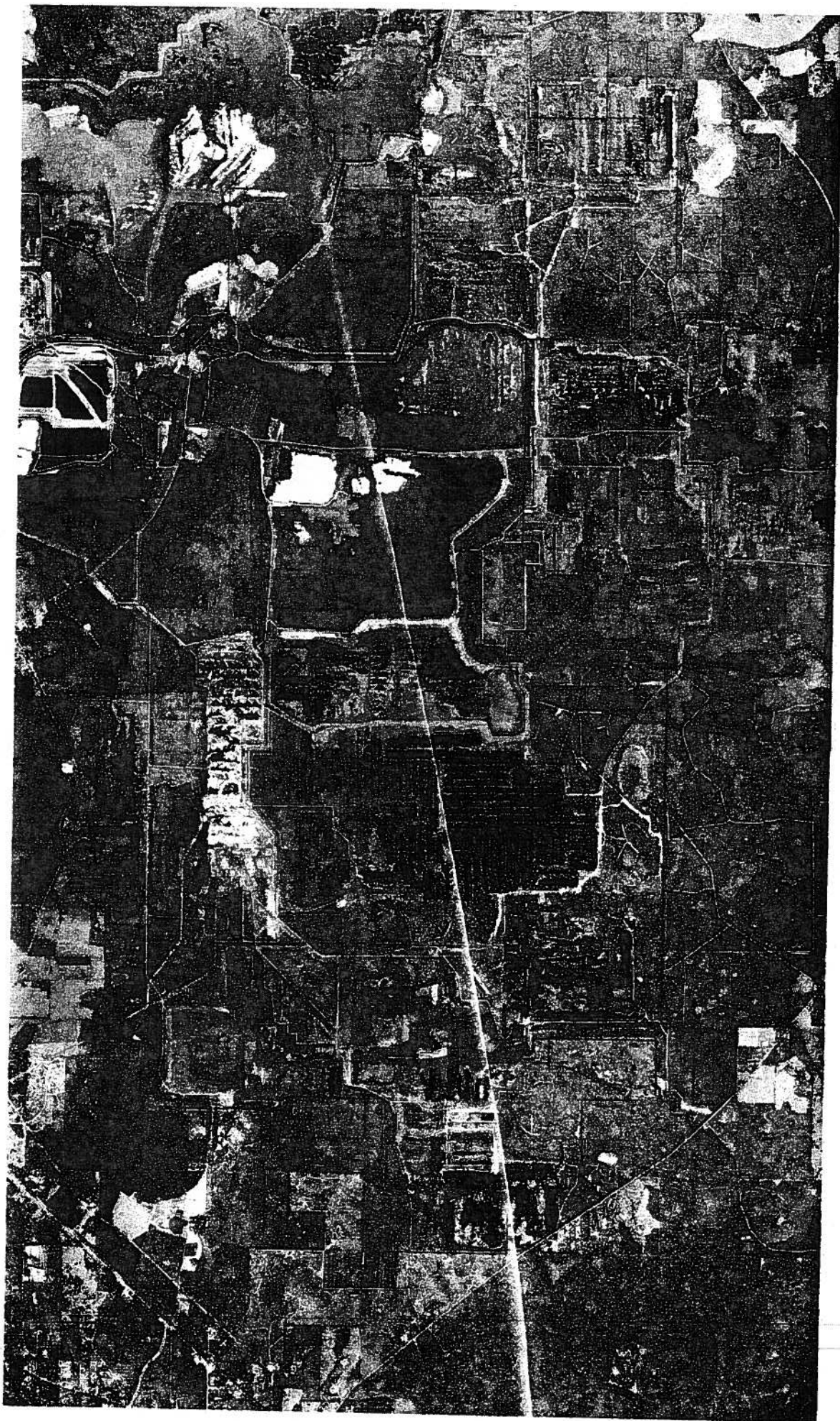
made you aware of the Consent Order under which PCS is currently operating under with respect to the dredging and restoration of a portion of Lake Purvis. It is our hope that this will help restore water quality to that lake, absent some additional negative influence from other sources such as contaminated ground water.

Through my personal observations, and based upon onsite inspections with the FDEP and PCS staff, it appears that the majority of our water-bodies are predominately ground-water influenced most of the time. For example, during a recent FDEP quarterly inspection I attended with PCS representative Cameron Lynch and Matt Wilson of the FDEP, we observed the actual significance of the ground water influence. Specifically, we inspected the dredging operation in an area known as PCS-HC-SC (23) (also known as South Lake Purvis) being conducted in connection with the Consent Order between PCS and the FDEP. Each of us noticed how evident the ground water influence was on this 3 acre area. It was as if someone had turned on a large water hose on the side of the bank within the shoreline. Ground water was literally just pouring into this 3 acre area. Later that evening I returned to find that the dredging contractor had the area completely drained. When I returned the next morning this same 3 acre area was more than half-way recharged through groundwater. The recharging of this area could only be coming from the ground-water since this area was completely isolated at the inlet and outlet as required by the Consent Order between the FDEP and PCS. This type of recharge of ground water occurrence continues regularly throughout the dredging operation to the north in SR-8 (Lake Purvis). Other water-bodies on BP lands within the mine boundary affected by ground water include Low Bush Bay (165+ acres), and Lake Bienville (650+ acres), which are future settling areas but currently are not used for that purpose. These lakes maintain consistent water levels even though there is no direct inlet flow into them. These lakes are designated by PCS as SR-SP(7) and SR-8715 for use as future clay settling areas but they have not been used to date for that purpose. I have attached an aerial of the 14,000 plus acres and a map highlighting all the water-bodies within our property boundary for your convenience.

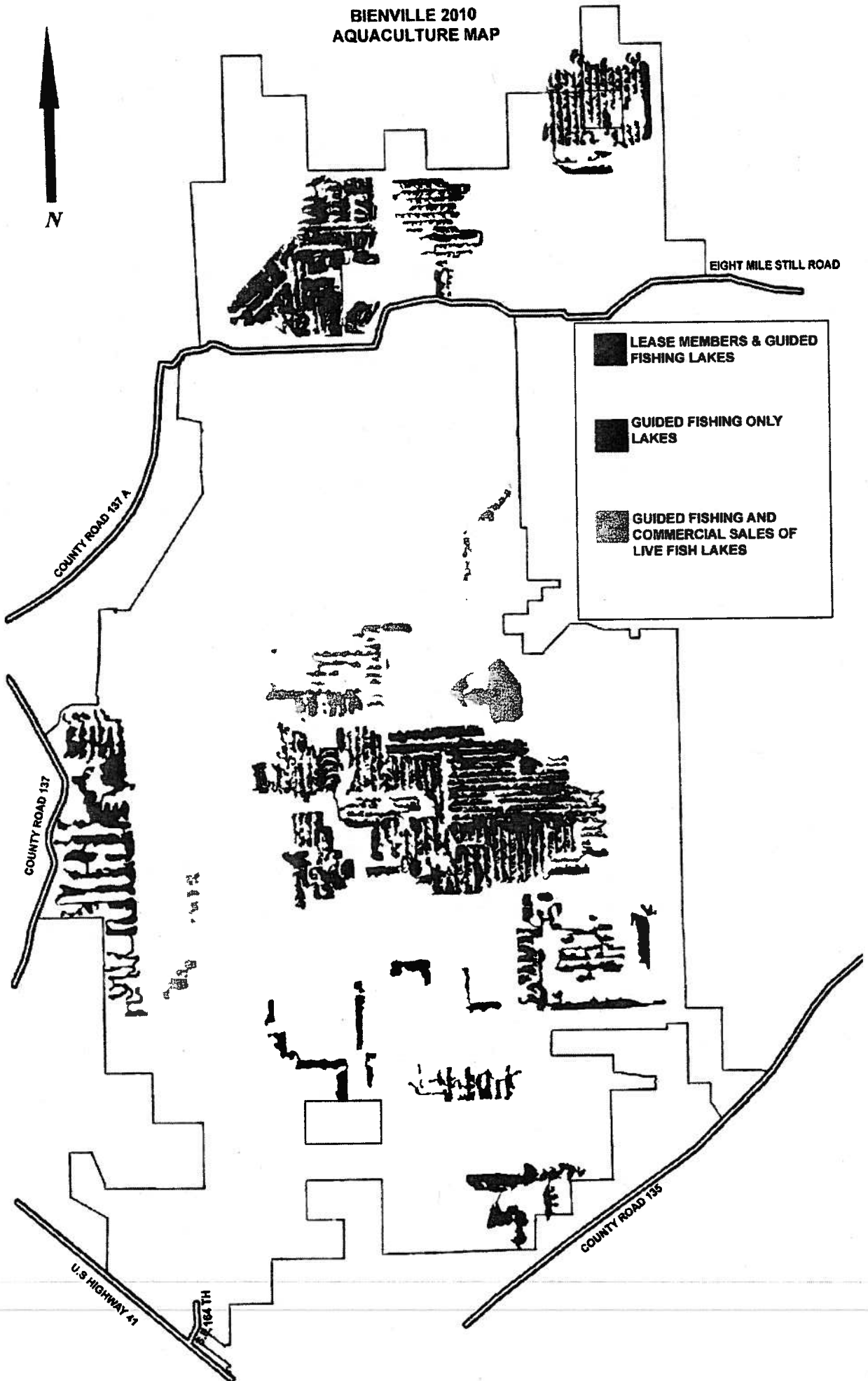
Because of the substantial amount of human and wildlife activity on BP lands within the PCS mine boundary and the obvious ground water influence on those lands, I think it may be wise for the EPA to determine the actual directional flows and lateral movements of the surficial aquifer within the mine boundary and to conduct regular and intensive testing of the drinking wells and water-bodies in excess of 10 plus acres until such time that the potential impacts on the environment, if any, has been fully determined. I believe the testing water should include: (i) measurement of radiological levels, (ii) arsenic, (iii) phosphate, (iv) nitrogen, (v) PH, (vi) Cadmium, (vii) Chromium, (viii) Sulfate, and (ix) Fluoride. BP will cooperate with the EPA, and PCS in connection with any such testing. While BP hopes that any impacts will be minimal, I would like to have the testing so that I may have reassurance given our ongoing operations and the potential exposure to our guests, employees and the wildlife in the area. Thank you for your efforts.

Sincerely,  
Dock Glawson  
478-960-6885





BIENVILLE 2010  
AQUACULTURE MAP







**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

JUN 2 2010

Mr. Steven A. Suty  
1986 Lake Chase Lane  
Jonesboro, Georgia 30236

Dear Mr. Suty:

The United States Environmental Protection Agency, Region 4 (EPA) received your written comment letter dated May 19, 2010. Your letter was submitted to EPA during the May 3, 2010 to May 20, 2010, public comment period on EPA's proposed Resource Conservation and Recovery Act (RCRA) Section 7003 Imminent Hazard Order on consent to be issued to PCS Phosphate – White Springs (PCS), located in White Springs, Florida.

In your letter, you reference concern for damage to the Floridan aquifer, the need to prevent reoccurrence, the need to line cooling ponds, and community reservations about water quality issues. EPA appreciates your concerns and clarifies that the purpose of this Order is to address issues related to sinkhole formation beneath the three phosphogypsum stacks and cooling ponds at PCS's two White Springs chemical complexes. It is EPA's intent that in addition to addressing sinkhole formation, groundwater quality will be determined in and around the chemical complexes through PCS's ongoing groundwater monitoring, the investigations that will be necessary for PCS to implement the work required by this Order, and through continued groundwater, surface water, soil, and sediment investigations being performed by PCS pursuant to a RCRA Section 3013 Monitoring, Analysis, and Testing Consent Order.

Enclosed, please find the final executed EPA RCRA Section 7003 Order that became effective on the date of signature by the EPA Region 4 RCRA Division Director. As PCS performs the analyses and implements the work required by the Order, EPA will keep you and the rest of the community apprised of its progress.

Please feel free to contact me at (404) 562-8542, or Joan Redleaf Durbin, the attorney assigned to this case, at (404) 562-9544 if you have further questions in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "BR", is written over a horizontal line.

Bethany Russell  
Environmental Scientist

Enclosure

cc: Karin S. Torain, PCS Administration (USA)  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP

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Bethany Russell  
US EPA, Region 4  
RCRA Division-ROECB  
61 Forsyth Street, SW, 10<sup>th</sup> Floor  
Atlanta, Ga 30303

May 19, 2010

Re: Comments on PCS Phosphate- White Springs, Fla  
Dec 10, 2009 Gypsum stack sink hole/ discharge

Dear Ms Russell,

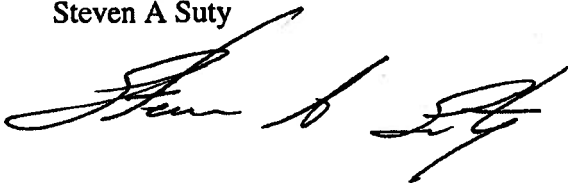
Per our phone conversation Mon May 17, 2010 I told you I had just received a copy of the fact sheet sent out to residences in Hamilton County, Fla, but lack a copy of order and administrative record for review. Your help in being able to review same by E-mail was most appreciated.

The gypstack sink hole collapse was an unfortunate event both for the company and community, much like the Gulf oil platform spill in the news today, It was only a matter of time and circumstances. I am pleased with the EPA viewpoint, that the discharge presents a substantial endangerment to human health and the environment. It's hard to gauge how much the Florida aquifer was denatured as a result. There are many components of the discharge which individually are problem sum, many are carcinogenetic. This is of a personal concern to me, having just recently lost my wife of 35yrs to cancer. We had both worked for the company under Oxy ownership

The need to prevent reoccurrence is recognized only after the fact, the continued wet handling of phosgyp will have an inherent risk going forward. Consideration should be given to dry handling phosgyp material. Liners for the cooling ponds should be required.

The long term effect on the community cannot be gauged. I will always have reservations about the water quality issues. I suspect most of the area residents will also. Well monitoring and reporting should be provided for property owners, as should water purification equipment as required.

Yours truly,  
Steven A Sutty





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

**JUN 2 2010**

Reverend Rosemarie Copeland  
16498 Collins St  
White Springs, Florida 32096

Dear Reverend Copeland:

The United States Environmental Protection Agency, Region 4 (EPA) received your written comment letter dated May 6, 2010. Your letter was submitted to EPA during the May 3, 2010 to May 20, 2010, public comment period on EPA's proposed Resource Conservation and Recovery Act (RCRA) Section 7003 Imminent Hazard Order on consent to be issued to PCS Phosphate – White Springs (PCS), located in White Springs, Florida.

In your letter, you reference concern for air pollution control and potential impacts to the springs in White Springs. EPA appreciates your concerns and clarifies that the purpose of this Order is to address issues related to sinkhole formation beneath the three phosphogypsum stacks and cooling ponds at PCS's two White Springs chemical complexes.

Enclosed, please find the final executed EPA RCRA Section 7003 Order that became effective on the date of signature by the EPA Region 4 RCRA Division Director. As PCS performs the analyses and implements the work required by the Order, EPA will keep you and the rest of the community apprised of its progress.

Please feel free to contact me at (404) 562-8542, or Joan Redleaf Durbin, the attorney assigned to this case, at (404) 562-9544 if you have further questions in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Bethany Russell", is written over a horizontal line.

Bethany Russell  
Environmental Scientist

Enclosure

cc: Karin S. Torain, PCS Administration (USA)  
Tim Bahr, FDEP  
Ashwin Patel, FDEP  
John Coates, FDEP

May 6, 2010

Dear Bethany Russell

That PCS plant stinks  
literally. I must roll up my  
window - in my car because the  
stunk burns my nostrils.

It is very dangerous.  
our area is #1 in cancer  
and many people have  
various forms of cancer. Especially  
those who have lived here for  
a long time.

It is bad on air pollution.  
too (Hamilton County) is #1 in air pollution

Please investigate this:  
we heard horror stories  
about men bleeding from  
their noses & quietly died  
later - after 20 years of  
working at the place. PCS, dying of cancer

PCS has also died  
up the 22 springs that  
White Springs had &  
the Spring House <sup>house</sup> has been  
dry ever since they built  
this sewage. Thank you

Captain Copelan

386 -

296-0888